CALIFORNIA BUILDING STANDARDS COMMISSION

# Monograph of Commission Action

2002 ANNUAL CODE ADOPTION CYCLE

**Note:** The Commission will meet on May 14, 2003 at 10:00 AM to ratify their actions of the March 19, 2003 meeting. The meeting will be held at the Department of Consumer Affairs building, First Floor Hearing Room, 400 R Street, Sacramento, California. 95814

Stanley T. Nishimura, Executive Director California Building Standards Commission 2525 Natomas Park Drive, Suite 130 Sacramento, CA 95833 (916) 263-0916

### MEMBERS OF THE COMMISSION

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[HF]

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Keith Lund Weston Arvin Vacant

[PEME]

[BFO]

(Ex-Officio Members) Gini Krippner, SFM William Condley, Jr., RESD

### Preface

California Building Standards Law (Health and Safety Code §18929.1) requires state agencies that propose building standards for adoption in, amendment to, or repeal from the California Building Standards Code (Title 24, California Code of Regulations) to submit for consideration in an annual code adoption cycle. This document contains the proposed building standards submitted for consideration in the 2002 ANNUAL CODE ADOPTION CYCLE for commenting by the public in accordance with administrative requirements of California Building Standards Law and the Administrative Procedures Act.

This document shows the action of the California Building Standards Commission on proposed code changes submitted for the 2002 Annual Code Adoption Cycle.

Code changes originally proposed by the state agencies were published in the "Monograph of Code Changes for 2002," July 2002, which was made available to the public for comment. In September 2002, the code advisory committees reviewed the proposed code changes, considered public comments, and suggested recommendations to the proposed code changes. The recommendations of the code advisory committees and the proposed code changes were made available to the public in the "45-Day Public Comment Monograph," October 2002, in accordance with the Administrative Procedures Act. In February 2003, the "Monograph of Public Comments" was made available to the public prior to the Commission taking action on each proposed code changes.

This monograph represents the final actions of the Commission at the March 19, 2003 meeting for each proposed code change submitted for the 2002 Annual Code Adoption Cycle, and contains the express terms adopted by the Commission.

The Commission will not hear new comments or challenges regarding any item printed herein at it's May 14, 2003 meeting

Note: The meeting facilities and restrooms are accessible to persons with disabilities. Requests for the following accommodations will be provided by the California Building Standards Commission by calling Ms. Lerryn McCoullogh at (916) 263-0916:

- ➤ Assistive Listening Devices
- ➤ Sign Language Interpreters
- **≻**Captioning

Requests are to be made no later than May 5, 2003 by 5:00 p.m. The Commission meeting will be held at the Consumers Affairs building located at 400 R Street, Sacramento, California 95814. Parking is available in parking garage adjacent to the Consumer Affairs building. Metered parking is also available about the building.

If paratransit services are needed, they may be contacted at (916) 429-2744.

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# California Building Standards Commission

### **APRIL 2003**

## Revisions to the California Building Standards Code California Code of Regulations Title 24

(Submittals for 2002 Annual Code Adoption Cycle)

**NOTE:** In order to follow the proposed revisions through the code change cycle, it is important to retain parts 1, 2, 3, 4, 5, & 9 of the California Building Standards Code.

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# **SUMMARY OF BUILDING STANDARDS COMMISSION ACTION**

ITEM NUMBER & DESCRIP- TION		FIN ACT FO I	TEN	Λ 1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY COMMENT PERIOD	1	ΓΟ 45 CHA	ACTIO 5 DAN LL'G A A	CAC RECOMMEND- ATION TO ITEM		C/ C/ REC	SC AC OM'I A A	D	CHALLENGE TO THE CAC RECOMMEND- ATION		CFIC CA CHA	LL'G	;
ITEM 1  DSA/SS 1/02  Amend Part 1, Ch. 4, Section 4-309 Reconstruction to conform with the Ed Code Sec. 17280 & 17295	X				NO COMMENT				Building Fire and Other Code Advisory Committee recommendation :	X								
SUB-ITEM 2- 1 OSHPD 4/02 Amend Part 1, Chapter 7 Final Review of Plans & Spec's.			X		NO COMMENT				Health Facilities-Code Advisory Committee recommendation:  Changed the proposed amendment to further clarify the intent of this section  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation  OSHPD requested:  APPROVE AS AMENDED	X			
SUB-ITEM 2-2 OSHPD 4/02 Amend Part 1, Chapter 7 Art 3, Sec. 7- 129, Time Limitations for Approval	X				NO COMMENT				Health Facilities-Code Advisory Committee recommendation :	Х								

ITEM NUMBER & DESCRIP- TION		FIN ACT TO I				CBSC ACTION TO 45 DAY CHALL'G			′	CAC RECOMMEND- ATION TO ITEM		CBSC ACTION ON CAC RECOM'D		D	CHALLENGE TO THE CAC RECOMMEND- ATION		C/ CHA	ON O AC LL'G	
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SUB-ITEM 2-3  OSHPD 4/02  Amend Part 1, Chapter 7, Article 4, Section 7-135  Time of Beginning Construction			×		NO COMMENT					Health Facilities-Code Advisory Committee recommendation : Change the proposed amendment from regulatory language to a note.  APPROVE AS AMENDED	X				OSHPD agrees with the CAC Recommendation  OSHPD requested:  APPROVE AS AMENDED	X			
SUB-ITEM 2-4  OSHPD 4/02  Amend Part 1, Chapter 7  Art. 4, Sec. 7-141  Administrati on of Construction	×				NO COMMENT					Health Facilities-Code Advisory Committee recommendation :	X								

ITEM NUMBER & DESCRIP- TION		FIN ACT ΓΟ Ι	ION TEN	Γ	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY COMMENT	1	ΓΟ 45 CHA	Α	F	CAC RECOMMEND- ATION TO ITEM		CTIC C. REC		D	CHALLENGE TO THE CAC RECOMMEND- ATION		CA CA CHA	LL'G A	F
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SUB-ITEM 2-5  OSHPD 4/02  Amend Part 1, Chapter 7 Art. 4, Sec. 7-155  Final Approval of the Work	X				NO COMMENT					Health Facilities-Code Advisory Committee recommendation :	X								
SUB-ITEM 2-6 OSHPD 4/02 Amend Part 1, Chapter 7 Art. 19, Sec. 7-203 Applying for the Certificate of Examination	X				NO COMMENT					Health Facilities-Code Advisory Committee recommendation :	X								
SUB-ITEM 2-7 OSHPD 4/02 Amend Part 1, Chapter 7 Art. 21, Sec. 7-2100- 7-2106 Scope of Resopsibil- ities			X		NO COMMENT					Health Facilities-Code Advisory Committee recommendation:  Coordinated modifications by CAC and OSHPD staff to various provisions  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation.  OSHPD requested:  APPROVE AS AMENDED	X			

ITEM NUMBER & DESCRIP- TION	Ш	FIN ACT FO I	SSC NAL TON TEN	Л	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY	ı	TO 49 CHA	ACTION DAY		CAC RECOMMEND- ATION TO ITEM		CTIC C. REC	SSC ON C AC OM'	D	CHALLENGE TO THE CAC RECOMMEND- ATION		CA CA CHA	LL'G	<b>;</b>
			Α	S	COMMENT PERIOD			А	S				Α	S				Α	S
ITEM 3  SFM 3/02  Amend Part 2, Chapter 10  Section 1007.5.11  Swing of Patient Room Doors			X		NO COMMENT					Building, Fire & Other Code Advisory Committee recommendation : Add clarifying language in the section heading for consistency  APPROVE AS AMENDED	X				SFM agrees with the CAC recommendations SFM requested:  APPROVE AS AMENDED	X			
SUB-ITEM 4-1  DSA/SS 3/02  Amend Part 2, Chapter 16A Section 1627A  Definitions	X				NO COMMENTS					Structural Design / Lateral Forces Advisory Committee recommendation :	X								
SUB-ITEM 4-2  DSA/SS 3/02  Amend Part 2, Chapter 16A Section 1629A.8  Selection of Lateral Force Procedure	X				NO COMMENTS					Structural Design / Lateral Forces Advisory Committee recommendation :  FURTHER STUDY		X			DSA/SS disagrees with the committee recommendation to Further Study  DSA/SS was concerned that the committee approved the same proposed amendment for OSHPD. This may cause a conflict. DSA/SS requested:  APPROVE AS SUBMITTED	X			

ITEM NUMBER & DESCRIP- TION	H	CE FII AC <sup>-</sup> TO	TIC	L ON	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	-	TO 45	ACTIO 5 DA' LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC C	SSC ON C AC OM'		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	N ON
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SUB-ITEM 4-3  DSA/SS 3/02  Amend Part 2, Chapter 16A Section 1629A.9  System Limitations				X	NO COMMENTS					Structural Design / Lateral Forces Advisory Committee recommendation :  Add language to help identify the parameters for not permitting severe torsional irregularity.  APPROVE AS AMENDED	X				DSA/SS agrees with the CAC recommendation.  DSA/SS requested:  APPROVE AS AMENDED	X		
SUB-ITEM 4-4  DSA/SS 3/02  Amend Part 2, Chapter 16A Section 1630A.2.2  Structural Period				X	COMMENT: S.K. Ghosh Portland Cement Assoc.  Mr. Ghosh feels this proposed revision is un- reasonable, arbitrary, unfair or capricious in whole or in part.  Mr. Ghosh requested a DIS- APPROVE			X		Structural Design / Lateral Forces Advisory Committee recommendation :  APPROVE	X							

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SUB-ITEM 4-5  DSA/SS 3/02  Amend Part 2, Chapter 16A Section 1630A.4 Combinatio n of Structural Systems			×		NO COMMENTS					Structural Design / Lateral Forces Advisory Committee recommendation : Change from the term "seismic loads" to "seismic load combinations" to clarify the application of the section.  APPROVE AS AMENDED	X				DSA/SS agrees with the CAC Recommendation.  DSA/SS requested:  APPROVE AS AMENDED	X			
SUB-ITEM 4-6  DSA/SS 3/02  Amend Part 2, Chapter 16A Section 1630A.7 Horizontal Torsional Moments	X				NO COMMENTS					Structural Design / Lateral Forces Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION				1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	1	ΓΟ 45	ACTIO 5 DAN LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC	AC		CHALLENGE TO THE CAC RECOMMEND- ATION	AC	CA	N C	
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SUB-ITEM 4- 7 DSA/SS 3/02			X							Structural Design / Lateral Forces Advisory Committee recommendation :	X				DSA/SS agrees with the CAC recommendation. DSA/SS requested:	X			
Amend Part 2, Chapter 16A Section 1631A.3 Math- ematical method					NO COMMENTS					Change the reference to "Table 16-M" to read "Table 16A-M."  APPROVE AS AMENDED					APPROVE AS AMENDED				
SUB-ITEM 4- 8 DSA/SS 3/02			X							Structural Design / Lateral Forces Advisory Committee recommendation :	X				DSA/SS agrees with the CAC recommendation.  DSA/SS requested:	X			
Amend Part 2, Chapter 16A Section 1631A.5.4 Reduction of Elastic Response Parameter for Design					NO COMMENTS					Strickout "Not Adopted by California" for item #2 of section 1631A.5.4 as originally submitted. Add banner "[For OSHPD 1 & 4 and DSA/SS] with text for irregular structures APPROVE AS AMENDED					APPROVED AS AMENDED				

ITEM NUMBER & DESCRIP- TION	Ш	FII AC	BSC NAL TION ITEN	1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	Ш	TO 45	ACTION DAY		CAC RECOMMEND- ATION TO ITEM		CTIC C/	SSC ON C AC OM'I		CHALLENGE TO THE CAC RECOMMEND- ATION	AC	CA	IO N	
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SUB-ITEM 4-9  DSA/SS 3/02  Amend Part 2, Chapter 16A Section 1632A.6  HVAC Ductwork, Plumbing/Pi ping and Conduit Systems			X		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  Add the words "medical gas and vacuum" between the words Fuel and piping for item #1 of section 1632A.6  APPROVE AS AMENDED	X				DSA/SS agrees with the CAC recommendation DSA/SS requested:  APPROVE AS AMENDED	X			
SUB-ITEM 4- 11 DSA/SS 3/02 Amend Part 2, Chapter 16A Section 1633A.2. 13.1	X				NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION	1	FIN ACT FO I	TEN	Л	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY	7	ΓΟ 4! CHA	ACTIO 5 DAN LL'G	′	CAC RECOMMEND- ATION TO ITEM	R	CTIC C/ REC	SSC ON C AC OM'	D	CHALLENGE TO THE CAC RECOMMEND- ATION	C	CB CTIC CA CHAI	N O C LL'G	<b>;</b>
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SUB-ITEM 4- 12 DSA/SS 3/02 Amend Part 2, Chapter 16A Table 16A-L Vertical Structural Irregularity			X		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  Remove ref.to Sec. 1629A.8.4, item #2 from Table 16A-L, item 1b "Severe Soft Story". Also, within item 4 of the table, remove strikeout from the words "greater than" and remove new proposed language "not within"  APPROVE AS AMENDED	X				DSA/SS agrees with the CAC recommendations DSA/SS requested:  APPROVE AS AMENDED	X			
SUB-ITEM 4- 13 DSA/SS 3/02 Amend Part 2, Chapter 16A Table 16A-M Plan Structural Irregularity			X		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  Add the term "Severe" in the body of the paragraph for item 1b, for consistency with the heading of the item  APPROVE AS AMENDED	X				DSA/SS agrees with the CAC recommendation DSA/SS requested:  APPROVE AS AMENDED	X			

ITEM NUMBER & DESCRIP- TION		FIN ACT TO I	TEN	I M	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY COMMENT	1	TO 4: CHA	ACTION TO THE PROPERTY OF THE	CAC RECOMMEND- ATION TO ITEM		CTIC C. REC	SSC ON C AC OM'	D	CHALLENGE TO THE CAC RECOMMEND- ATION	CTIC C/ CHA	SC ON O AC LL'G A	ì
SUB-ITEM 4- 14  DSA/SS 3/02  Amend Part 2, Chapter 22A Section 2210A  Adoption	X				NO COMMENTS				Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X							
SUB-ITEM 4- 15  DSA/SS 3/02  Amend Part 2, Chapter 22A Section 2211A  Item 1, Part 1, Glossary			X		COMMENT:  Kurt Schaefer, Deputy Director, OSHPD  Mr. Schaefer comment states that the new definition in this sub- section is incorrect and conflicts with the correct definition in S3	>			Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE		X						
SUB-ITEM 4- 16 DSA/SS 3/02 Amend Part 2, Chapter 22A Section 2213A.7.6 Trusses in SMRF	X				NO COMMENTS				Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X							

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SUB-ITEM 4- 17  DSA/SS 3/02  Amend Part 2, Chapter 16B Div. IV Repeal DSA/SS adoption of Chapter 16B, Div.IV	X				NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X							
SUB-ITEM 5- 1 OSHPD 3/02 Amend Part 2, Chapter 16A, Section 1627A Definitions	X				NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :	X							

ITEM NUMBER & DESCRIP- TION	Ш	FIN ACT TO I	TEM F	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY COMMENT	TO 49	ACTION DAY	Y F	CAC RECOMMEND- ATION TO ITEM		CB CTIC CA RECC	ON O	F	CHALLENGE TO THE CAC RECOMMEND- ATION	CA CHA	ON ON AC LL'G	F
SUB-ITEM 5-2 OSHPD 3/02 Amend Part 2, Chapter 16A, Section 1629A.8 Selection of Lateral Force Procedure	X		AS	NO COMMENTS		A	S	Structural Design & Lateral Forces Code Advisory Committee recommendation :	X		A	Ø			A	S

ITEM NUMBER & DESCRIP- TION	11	FIN ACT TO I	SSC NAL TON TEM		CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY	1	ΓΟ 45 CHA	ACTION DAY		CAC RECOMMEND- ATION TO ITEM		CTIC C/ REC	SC ON C AC OM'I		CHALLENGE TO THE CAC RECOMMEND- ATION	AC1	CA	NO N
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SUB-ITEM 5-3  OSHPD 3/02  Amend Part 2, Chapter 16A, Section 1629A.9  System Limitations			X		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  Add language to help identify the parameters for not permitting severe torsional irregularity  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation: OSHPD requested:  APPROVED AS AMENDED	X		

ITEM NUMBER & DESCRIP- TION		FII AC	BSC NAL TION ITEN	1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		TO 4	ACTI( 5 DA` ILL'G		CAC RECOMMEND- ATION TO ITEM		CB: CTIO CA	N C		CHALLENGE TO THE CAC RECOMMEND- ATION		CB CTIC CA CHAI	N C	
	Α	D	A		DURING 45 DAY COMMENT PERIOD	А	D	A	F S		А	D	A	F S		Α	D	A A	F S
SUB-ITEM 5-4  OSHPD 3/02  Amend Part 2, Chapter 16A, Section 1630A.2.2  Structural Period					#1: S.K. Ghosh Portland Cement Assoc.  Mr. Ghosh feels this proposed revisions is unreasonable, arbitrary, unfair or capricious in whole or in part.  Mr. Ghosh is requesting a DIS- APPROVAL of this item.  COMMENT #2: Doug C. Honbach, Chair, SEAOC Seismology Committee  Mr. Honbach feels the proposed amendment would overcompensa te for the cited effect.  It is unclear what Mr. Honbach is requesting.		X	X		Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION				N	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		TO 45	ACTIO 5 DAN LL'G		CAC RECOMMEND- ATION TO ITEM		CB: CTIO CA	N C		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	10 N	
	A	D	Д		DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		A	D	A A	F S		A	D	A A	F S
SUB-ITEM 5-5  OSHPD 3/02  Amend Part 2, Chapter 16A, Section 1630A.4  Combination of Structural Systems			×		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation : Change paragraph 2.3 by modifying the term "seismic loads" to the term "seismic load combinations"  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation: OSHPD requested:  APPROVED AS AMENDED	X			
SUB-ITEM 5-6 OSHPD 3/02 Amend Part 2, Chapter 16A, Section 1630A.7 Horizontal Torsional Moments	X				NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :	X								

ITEM NUMBER & DESCRIP- TION				1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		TO 4	ACTI( 5 DA` ILL'G	<b>′</b>	CAC RECOMMEND- ATION TO ITEM		CBS CTIO CA SECC	N O		CHALLENGE TO THE CAC RECOMMEND- ATION		CTIC CA	SC ON OI AC LL'G	7
	A	D	A A		DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		A	D	A A	F S		A	D		F S
SUB-ITEM 5-7 OSHPD 3/02 Amend Part 2, Chapter 16A, Section 1630A.10 Story Drift Limitation	X				NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X								
SUB-ITEM 5-8  OSHPD 3/02  Amend Part 2, Chapter 16A, Section 1631A.3  Mathematical Model			X		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation : Correct the ref. to Table 16-M to read "Table 16A-M, Item 3"  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation OSHPD requested:  APPROVE AS AMENDED	X			

ITEM NUMBER & DESCRIP- TION		FIN ACT	SSC NAL TION	٧	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		TO 4	ACTIO 5 DAN LL'G		CAC RECOMMEND- ATION TO ITEM		CB CTIC CA	NC		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	N C	
	Α	_	_	F	DURING 45 DAY COMMENT PERIOD	А	D	A A	F S		A		A A	-		Α	D	A A	F S
SUB-ITEM 5-9  OSHPD 3/02  Amend Part 2, Chapter 16A, Section 1631A.5.4  Reduction of Elastic Response Parameters for design			X		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  Remove strikeout for item #2 of section 1631A.5.4 as originally submitted. Add the banner "[OSHPD 1 & 4 and DSA/SS]"  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation OSHPD requested:  APPROVE AS AMENDED	X			
SUB-ITEM 5- 10 OSHPD 3/02 Amend Part 2, Chapter 16A, Section 1632A.6 HVAC Ductwork Plumbing/Pi ping and Conduit Systems	X				NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION	1	FIN ACT	SSC NAL TON TEN A A	Л	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY COMMENT PERIOD		ACTION DAY	CAC RECOMMEND- ATION TO ITEM		CB: CA RECC	N C	CHALLENGE TO THE CAC RECOMMEND- ATION		CTIC C/ CHA	AC LL'(	
SUB-ITEM 5- 12 OSHPD 3/02 Amend Part 2, Chapter 16A, Section 1633A .2.13.1	X				NO COMMENTS			Structural Design & Lateral Forces Code Advisory Committee recommendation :	X							
SUB-ITEM 5- 13  OSHPD 3/02  Amend Part 2, Chapter 16A, Table 16A-L  Vertical Structural Irregularity			X		NO COMMENTS			Structural Design & Lateral Forces Code Advisory Committee recommendation :  Remove ref. to section 1629A.8.4, item 2 from Table 16A-L, item 1b "Severe Soft Story" Within item #4 of Table 16A-L remove strikout of existing language "greater than" and remove new proposed language "not within"  APPROVE AS AMENDED	X			OSHPD agrees with the CAC recommendation. OSHPD requested:  APPROVE AS AMENDED	X			

ITEM NUMBER & DESCRIP- TION		FIN AC1	BSC NAL TION	1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		TO 45	ACTIO 5 DAN LL'G		CAC RECOMMEND- ATION TO ITEM		CBS CTIOI CA RECO	N C		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	10 N	7
	Α	D	A		DURING 45 DAY COMMENT PERIOD	Α	D	A A	F S		Α	D	A A	F S		Α	D	A A	F S
SUB-ITEM 5- 14  OSHPD 3/02  Amend Part 2, Chapter 16A, Table 16A-M  Plan Structural Irregularity			X		NO COMMENTS					Structural Design & Lateral Forces Code Advisory Committee recommendation :  Add the term "Severe" in the body of the paragraph for item 1b, for consistency with the heading of the item.  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation. OSHPD requested:  APPROVE AS AMENDED	X			
SUB-ITEM 5- 15 OSHPD 3/02 Amend Part 2, Chapter 22A, Section 2210A Adoption	X				NO COMMENT					Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION				N	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		BSC / TO 45 CHA		Ý	CAC RECOMMEND- ATION TO ITEM		CB CTIC CA	N C		CHALLENGE TO THE CAC RECOMMEND- ATION		CB CTIC CA CHA	AC	
	A	_	_	F	DURING 45 DAY COMMENT PERIOD	Α	D	A A	F S		A	_		F S		A			
SUB-ITEM 5- 16  OSHPD 3/02  Amend Part 2, Chapter 22A, Section 2211A  Amendments					COMMENT: Kurt A. Schaefer, Deputy Director, Office of Statewide Health Planning and Development  Mr. Schaefer states that adding the definition for Inelastic Rotation of Beam-to- Column Connection is incorrect and conflicts with the correct definition in S3.  OSHPD requested:  APPROVE AS AMENDED			X		Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION		FII AC	BSC NAL TION ITEN	ı	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	-	TO 45	ACTIO 5 DAY LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC C	SSC ON C AC OM'I		CHALLENGE TO THE CAC RECOMMEND- ATION		CTIC	٩C	
	Α	D	A A		DURING 45 DAY COMMENT PERIOD	Α	D	A	F S		Α	D	A A	F S		Α	D	A A	F S
SUB-ITEM 5- 17  OSHPD 3/02  Amend Part 2, Chapter 22A, Section 2213A.7.6  Trusses in SMRF	X				NO COMMENT					Structural Design & Lateral Forces Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION		FIN ACT	SSC NAL TION	1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	1	ΓΟ 45	ACTIO 5 DAY LL'G		CAC RECOMMEND- ATION TO ITEM		CB CTIC CA	٩C		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	N O	
	Α	D	A A		DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		Α	D	A A	F S		A	D		F S
ITEM 6  DSA/SS 2/02  Adopt 2002  National Electrical Code			X		NOCOMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation : Add articles 411, 504, 505, 647,692 & 820  APPROVE AS AMENDED	X				DSA/SS agrees with the CAC recommendation DSA/SS requested:  APPROVE AS AMENDED	X			

ITEM NUMBER & DESCRIP- TION	_	FIN ACT		1 F	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY COMMENT	_	SSC A TO 45 CHA D	DA` LL'G	F	CAC RECOMMEND- ATION TO ITEM	CB CA CA ECC	ON C OM'	D F	CHALLENGE TO THE CAC RECOMMEND- ATION	ACT	ALL	ON .'G
ITEM 7			A	S	PERIOD			A	S	Dlumbing	V	Α	S	DSA/AC disagraps	V	,	A S
DSA/AC 2/02 Adopt 2002 National Electrical Code			X		NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation : Fire Alarm Manual Pull Stations  APPROVE BUT RECOMMEND FUTHER STUDY FOR SECTION 760.16	×			DSA/AC disagrees with the PEME recommendation to Further Study  DSA/AC agrees with the Accessibility committee recommendation to approve as amended  DSA/AC requested:  APPROVE AS AMENDED	X		

ITEM NUMBER & DESCRIP- TION		FIN AC	BSC NAL FION	1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED			ACTIO 5 DAY LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC	AC	CHALLENGE TO THE CAC RECOMMEND- ATION	AC.	CA	N O	
	A	D	A A		DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		A	D	A A		A	D	A A	F S
ITEM 8  OSHPD 5/02  Adopt 2002  National Electrical Code			X		NOCOMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  Move orig. proposed amendment for Article 110, Section 110.26 to Article 517, Section 517.12 as this is the appropriate location for applications related to health facilities. Also remove existing amendment to Article 517, Section 517.18(a.1) as the amendment is no longer necessary.  APPROVE AS AMENDED	X			OSHPD agrees with the CAC recommendations OSHPD requested:  APPROVE AS AMENDED	X			

ITEM NUMBER & DESCRIP-	11	FIN AC	SSC NAL TION	1	CHALLENGE(S) TO PROPOSED CODE CHANGE	1	ΓΟ 45	ACTIO 5 DAY LL'G		CAC RECOMMEND- ATION		CB CTIC CA	AC ON C		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	N ON	٧
TION	A		A A	F S	AS NOTICED DURING 45 DAY COMMENT PERIOD	Α	D	A A	F S	TO ITEM	A	D		F S		A	_		F S
BSC 1/02 Adopt 2002 National Electrical Code	X				NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  APPROVE	X								
HCD 1/02  Adopt 2002 National Electrical Code, Article 89, Article 90, Chapters 1, 2, 3, 4, 5, 6, 7, and 9   1 Commission divided the question in order to deal with NEC Chapter 8, listed below, separetly	×				NOCOMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  Add the adoption of Article 701  APPROVE AS AMENDED		X			HCD disagrees with the PEME recommendation to Approve As Amended.  HCD requested:  APPROVE AS SUBMITTED	×			

ITEM NUMBER & DESCRIP- TION	1	FIN ACT FO I	TEI	N M	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		ΓΟ 45 CHA	ACTION STATEMENT ACTION	<b>′</b>	CAC RECOMMEND- ATION TO ITEM	F	CTIC C. REC	SSC ON C AC OM'	D	CHALLENGE TO THE CAC RECOMMEND- ATION	(	CTIC CA CHA	AC LL'G	3
	Α	D	A		DURING 45 DAY COMMENT PERIOD	A	D	A	F S		A	D	A A	F S		Α	D	A A	
HCD 1/02  Adopt 2002 National Electrical Code, Article 90, Chapter 8 <sup>2</sup> Commission directed HCD to reconsider its proposal to not adopt Chapter 8 and sent the issue back to the PEME committee for discussion with HCD and resolution of the issue.					NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  Add the adoption of Articles 800, 820 & 830  APPROVE AS AMENDED		×			HCD disagrees with the PEME recommendation to Approve As Amended.  HCD requested:  APPROVE AS SUBMITTED		X		
ITEM 11  SFM 1/02  Adopt 2002  National Electrical Code	X				NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION			N	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	1	ΓΟ 45	ACTIO 5 DAY LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC	٩C		CHALLENGE TO THE CAC RECOMMEND- ATION		CTIC C	SSC ON C AC LL'C	
		D	F	DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		A			F		А	_		
SUB-ITEM 12-1 OSHPD 2/02 Amend Part 4, Chapter 2, Section 203-A Definitions	X			NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  APPROVE	X								
SUB-ITEM 12-2 OSHPD 2/02 Amend Part 4, Chapter 3, Section 316.0, Essential Mech-anical Provisions	х			NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :	х								

ITEM NUMBER & DESCRIP- TION		CE FIN ACT	NAI TIO	L ON	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	1		ACTIO 5 DA' LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC	AC		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	N ON
	Α	D		A F	DURING 45 DAY COMMENT PERIOD	А	D	A A	F S		Α	D	A A	F S		A	D	A :
SUB-ITEM 12-3  OSHPD 2/02  Amend Part 4, Chapter 4, Section 407.2,  Outdoor air intakes and exhaust outlets  SUB-ITEM	X			×	COMMENT: Shlomo Rosenfeld Mr. Rosenfeld found conflicts between the 2001 CBC and the 2001 CMC for "Exhaust Point of Discharge"		X	X		Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  APPROVE  Plumbing	X				OSHPD agrees	X		
OSHPD 2/02  Amend Part 4, Chapter 4, Section 407.4,  Air Circulation				^	Shlomo Rosenfeld  Mr. Rosenfeld found this proposed amendment allows ventilation for toilet rooms under 30 S.F. by transfer from the corridor. He found that ADA toilet rooms can not be designed within 30 S.F.		*			Electrical Mechanical and Energy Code Advisory Committee recommendation : Include Table 4C in exception 2 of section 407.4.1.3  APPROVE AS AMENDED					with the recommendation  OSHPD requested  APPROVE AS AMENDED	*		

ITEM NUMBER & DESCRIP- TION		FIN ACT	SSC NAL TON TEN		CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	1		ACTIO 5 DAY LL'G		CAC RECOMMEND- ATION TO ITEM		CB CTIC CA RECO	N C		CHALLENGE TO THE CAC RECOMMEND- ATION	AC	CBS TIO CA HAL	N O	
	A	D	A A	F S	DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		Α	D	A A	F S		A	D	A A	F S
SUB-ITEM 12-5 OSHPD 2/02 Amend Part 4, Chapter 4, Section 410.0,			X		NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation : Add the word	X				OSHPD agrees with the recommendation OSHPD requested:	X			
Laborator- ies										"incompatible" in section 410.3 APPROVE AS AMENDED					APPROVE AS AMENDED				

ITEM NUMBER & DESCRIP- TION			٧	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		TO 4	ACTIO 5 DAY LL'G		CAC RECOMMEND- ATION TO ITEM		CB CTIC CA	AC		CHALLENGE TO THE CAC RECOMMEND- ATION		CA	N O	
	Α		F	DURING 45 DAY COMMENT PERIOD	Α	D	A A	F S		_	D		_		Α		-	
SUB-ITEM 12-6 OSHPD 2/02 Amend Part 4, Chapter 6, Section 602.1, General	X			COMMENT: Shlomo Rosenfeld Mr. Rosenfeld found this proposed amendment allows ventilation for toilet rooms under 30 S.F. by transfer from the corridor. Mr. Rosenfeld is requesting that section 602.1 be changed to allow 50 S.F. or under for ventilation from the corridor.		X			Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  APPROVE	×								

ITEM NUMBER & DESCRIP- TION	II	FIN ACT	SSC NAL TON TEN		CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	-	TO 45	ACTIC 5 DAY LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC C	SSC ON C AC OM'I		CHALLENGE TO THE CAC RECOMMEND- ATION		CTIC	AC	
	Α	D	A A	F S	DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		A	D	A A	F S		A	D	A A	F S
SUB-ITEM 12-7 OSHPD 1/02 Amend Part 4, Ch.11, Refrigera- tion, Section 1131.1 Location	X				NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  APPROVE	X								

ITEM NUMBER & DESCRIP- TION		FIN ACT	SSC IAL ION TEN		CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED		BSC A TO 45 CHA	DA'		CAC RECOMMEND- ATION TO ITEM		CTIC	AC	CHALLENGE TO THE CAC RECOMMEND- ATION	AC	CA	N ON
	A	D	A A	F S	DURING 45 DAY COMMENT PERIOD	A	D	A A	F S		A	D	A A		А	D	A F
SUB-ITEM 12-8  OSHPD 1/02  Table 4-A  Pressure Relation- ship and Ventilation Require- ments for General Acute Care Facilities, Correctional Treatment Centers, Outpatient Facilities and Licensed Clinics			X		COMMENT: #1  Shlomo Rosenfeld  Mr. Rosenfeld found a conflict between the 2001 CBC and 2001 CMC regarding the number of air changes per hour.  COMMENT: #2  Shlomo Rosenfeld  Mr. Rosenfeld found several typographical errors in column C.		X			Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation:  Change the term "For nonsensitive rooms" to read, "For all rooms not listed in this footnote or not listed in Table 315" This is intended to add clarity.  APPROVE AS AMENDED	X			OSHPD agrees with the committee recommendation OSHPD requested:  APPROVE AS AMENDED	X		

ITEM NUMBER & DESCRIP- TION				1	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED	٦		ACTIO 5 DA' LL'G		CAC RECOMMEND- ATION TO ITEM		CTIC	٩C		CHALLENGE TO THE CAC RECOMMEND- ATION		CTIC C/	SC ON ON AC LL'G	
	Α	D	A A		DURING 45 DAY COMMENT PERIOD	А	D	A A	F S		Α	D	A A	F S		Α	D	A A	F S
SUB-ITEM 13-1 OSHPD 1/02 Amend Part 5, Ch.4, Table 4-2 Plumbing Fixture Table	X				NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  APPROVE	X								
SUB-ITEM 13-2 OSHPD 1/02 Amend Part 5, Ch.6, Section 612.2 Water Supply and Distribu-tion			X		NO COMMENT					Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation :  Remove the word "hot" in the title and body of the paragraph for section 612.1 to be consistent with the committee modification to section 612.2  APPROVE AS AMENDED	X				OSHPD agrees with the CAC recommendation OSHPD requested:  APPROVE AS AMENDED	X			

ITEM NUMBER & DESCRIP- TION		AL		7	ΓΟ 45 CHA	ACTIO 5 DAY LL'G A A	CAC RECOMMEND- ATION TO ITEM		CBSC CAC CAC RECOM D A	ON 'D F	CHALLENGE TO THE CAC RECOMMEND- ATION	ACT ( CH	ALL	ON
SUB-ITEM 13-3 OSHPD 1/02 Amend Part 5, Ch.9, Section 906.2.1 Vents		X	NOCOMMENT				Plumbing Electrical Mechanical and Energy Code Advisory Committee recommendation : Strike the ref. to OSHPD #3. This provision was not intended to be applicable to OSHPD #3.  APPROVE AS AMENDED	×			OSHPD agrees with the CAC recommendation OSHPD requested:  APPROVE AS AMENDED	X		

ITEM NUMBER & DESCRIP- TION	_	FIN ACT TO I	ION TEN	Λ	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY	-		5 DA` LL'G	Y	CAC RECOMMEND- ATION TO ITEM	R	CBSC CTION ON CAC RECOM'D	CHALLENGE TO THE CAC RECOMMEND- ATION	(	CBS CTION CAC CHALL	I ON ; _'G
	A	D	A A	F S	COMMENT PERIOD	А	D	A A	F S		A	AS		А		A F A S
SUB-ITEM 14-1  SFM 2/02  Amend Part 9, Article 10, Section 1006.2.7.1.1  (Fire Alarm) System Require- ments			X		NOCOMMENT					Building Fire and Other Code Advisory Committee recommendation  Article 10, Section 1006.2.7.1.1 and the exception be amended. However, the recommended amendment to the exception has been codified in the 2001 California Fire Code. The SFM inadvertently showed text in the exception that had been repealed in the 2000 Annual Code Adoption Cycle.  APPROVE AS AMENDED	X		SFM agrees with the CAC recommendation SFM requested:  APPROVE AS AMENDED	X		

ITEM NUMBER & DESCRIP- TION	_	FII AC	BSC NAL TION ITEM A A	Λ F	CHALLENGE(S) TO PROPOSED CODE CHANGE AS NOTICED DURING 45 DAY COMMENT PERIOD	BSC ASTO AST	DA	CAC RECOMMEND- ATION TO ITEM		CBS CTIO CA RECC	N O .C	CHALLENGE TO THE CAC RECOMMEND- ATION	ACT	CAC ALL	ON G A F
SUB-ITEM 14-2 SFM 2/02 Amend Part 9, Article 10, Section 1006.3.3.3.1 (Fire Alarm System) General			X		NO COMMENT			Building Fire and Other Code Advisory Committee recommendation  Article 10, Section 1006.3.3.3.1 be amended to include language that was already in the 2001 California Fire Code. SFM inadvertently left out text that was added in the 2000 Annual Code Adoption Cycle.  APPROVE AS AMENDED	X			SFM agrees with the CAC recommendation SFM requested:  APPROVE AS AMENDED	X		

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#### Identification of Changes

#### **Example of Code Change Submittal:**

ITEM <u>3</u> [BFO]

SFM 2/02 Part 9

Section 1006.2.7.1.1 & 1006.3.3.3.1

In keeping with the established format, each code change is identified by an eight-part designation as follows:

(1) [BFO]

SFM 2/ 02-P

(6)

Part 9, Chapter 10

- (7) Petition Note:
- (8) Repeal or Amend Section 1006:

The above reference would refer to an amendment of:

- (Item Number) Item 3 of the Code Advisory Committee agenda;
- (Code Advisory Committee) Committee to which the Item 3 is referred, the Building, Fire & Other [BFO];
- (Proposing State Agency) Proposing state agency initials, SFM;
- (Submittal Number) Second code change submitted, 2;
- (Year Submitted) Submitted due to a Petition for 1999P;
- (Part and/or Chapter or Article) Chapter 10 affected;
- (Petition Note, when applicable) Note: indicating this code change is in response to a code change petition, identifying petitioner;
- (8) (Action Proposed by State Agency) Proposed action to repeal section 1014.

#### **Express Terms Legend**

- California amendment (CA) brought forward **without** modification: *All language will appear in italics*.
- California amendment (CA) brought forward **with** modification: *All language will appear in italics, modified language is shown underlined.*
- (3) Repealed text: Shown as Strikeout.

#### **Legend of Proposing or Adopting State Agencies**

CBSC -	California Building Standards Commission Thomas L. Morrison(916) 263-	-0916
HCD -	Department of Housing and Community Development Chris Anderson(916) 445-	-9471
DSA/AC -	Division of the State Architect Access Compliance Michael Mankin(916) 445-	-5753
DSA/SS -	Division of the State Architect Structural Safety Richard Conrad(916) 445-	-8100
OSHPD -	Office of Statewide Health Planning & Development Sue Botelho(916) 654-	-2012
SFM -	State Fire Marshal Leslie Williams(916) 445-	-8200

#### **HEALTH & SAFETY CODE SECTION 18930**

SECTION 18930. APPROVAL OR ADOPTION OF BUILDING STANDARDS; ANALYSIS AND CRITERIA; REVIEW CONSIDERATIONS; FACTUAL DETERMINATIONS

- (a) Any building standard adopted or proposed by state agencies shall be submitted to, and approved or adopted by, the California Building Standards Commission prior to codification. Prior to submission to the commission, building standards shall be adopted in compliance with the procedures specified in Article 5 (commencing with Section 11346) of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code. Building standards adopted by state agencies and submitted to the commission for approval shall be accompanied by an analysis written by the adopting agency or state agency that proposes the building standards which shall, to the satisfaction of the commission, justify the approval thereof in terms of the following criteria:
  - (1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.
  - (2) The proposed building standard is within the parameters established by enabling legislation and is not expressly within the exclusive jurisdiction of another agency.
  - (3) The public interest requires the adoption of the building standards.
  - (4) The proposed building standard is not unreasonable, arbitrary, unfair, or capricious, in whole or in part.
  - (5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.
  - (6) The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.
  - (7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.
    - (A) If a national specification, published standard, or model code does not adequately address the goals of the state agency, a statement defining the inadequacy shall accompany the proposed building standard when submitted to the commission.
    - (B) If there is no national specification, published standard, or model code that is relevant to the proposed building standard, the state agency shall prepare a statement informing the commission and submit that statement with the proposed building standard.
  - (8) The format of the proposed building standards is consistent with that adopted by the commission.
  - (9) The proposed building standard, if it promotes fire and panic safety as determined by the State Fire Marshal, has the written approval of the State Fire Marshal.
- (b) In reviewing building standards submitted for its approval, the commission shall consider only the record of the proceedings of the adopting agency, except as provided in subdivision (b) of Section 11342.3 of the Government Code.
- (c) Where the commission is the adopting agency, it shall consider the record submitted to, and considered by, the state agency that proposes the building standards and the record of public comment that results from the commission's adoption of proposed regulations.
- (d) (1) The commission shall give great weight to the determinations and analysis of the adopting agency or state agency that proposes the building standards on each of the criteria for approval set forth in subdivision (a). Any factual determinations of the adopting agency or state agency that proposes the building standards shall be considered conclusive by the commission unless the commission specifically finds, and sets forth its reasoning in

writing, that the factual determination is arbitrary and capricious or substantially unsupported by the evidence considered by the adopting agency or state agency that proposes the building standards.

(2) Whenever the commission makes a finding, as described in this subdivision, it shall return the standard to the adopting agency or state agency that proposes the building standards for a reexamination of its original determination

of the disputed fact.

(e) Whenever a building standard is principally intended to protect the public health and safety, its adoption shall not be

"factual determination" for purposes of subdivision (d). Whenever a building standard is principally intended to conserve energy or other natural resources, the commission shall consider or review the cost to the public or benefit to be derived as a "factual determination" pursuant to subdivision (d). Whenever a building standard promotes fire and panic safety, each agency shall, unless adopted by the State Fire Marshal, submit the building standard to the State Fire Marshal for prior approval.

(f) Whenever the commission finds, pursuant to paragraph (2) of subdivision (a), that a building standard is adopted by an adopting agency pursuant to statutes requiring adoption of the building standard, the commission shall not consider or review whether the adoption is in the public interest pursuant to paragraph (3) of subdivision (a).

# Part 1 California Building Standards Administrative Code

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ITEM 1 DSA-SS 1/02 Part 1 Chapter 4, Section 4-309

## 4-309. Reconstruction or Alteration Projects in Excess of \$25.000 in Cost.

- (a) General. Plans and specifications for any reconstruction or alteration project exceeding \$25,000 in cost shall be submitted to DSA for approval in accordance with Section 4-315, except as provided within this section. The cost of work classified as maintenance as defined in Section 4-314 shall not be considered for purposes of this section. When the estimated cost of a reconstruction or alteration project exceeds \$25,000 but does not exceed \$100,000, and a licensed structural engineer determines that the project does not include any work of a structural nature, approval of the project plans and specifications by DSA is not required, provided the following three items are completed:
- 1. The structural engineer shall submit a written statement to DSA, indicating that the project does not contain any work of a structural nature.
- 2. The design professional in general responsible charge
- of the project shall certify, in writing, that the plans and specifications for the project meet any applicable fire and life-safety standards, and do not specify any work of construction that is regulated by the accessibility standards of Title 24. This certification shall be submitted to DSA, and shall bear the stamp and signature of the design professional.
- 3. Within 10 days of the completion of the project, a DSA-certified project inspector shall sign and submit a verified report to DSA, indicating that the project was completed in conformance with the plans and specifications. (See Section 4-336 Verified Reports).

School construction projects shall not be subdivided for the purpose of evading the cost limitations of this section.

All new construction work which is part of a reconstruction or alteration project shall comply with currently effective regulations.

EXCEPTION: Fire damage repair may be accomplished utilizing the approved plans and specifications for the original construction work. All regulations and standards in effect at the time of approval shall be complied with except that the testing and inspection requirements of current regulations shall apply to the reconstruction work. Minor modifications to the original approved plans may be made, subject to the approval of DSA, provided that they do not reduce the structural

capacity of the building.

Minor structural modifications to the existing structural system not exceeding the limits defined in Section 4-309 (c) 2 A and B are permitted provided these modifications comply with the regulations in effect when the plans and specifications for the original construction were approved.

- (b) Existing Non-complying Nonstructural Elements. Existing non-complying nonstructural elements discovered during the design or construction of a reconstruction, alteration or addition to an existing complying school building and directly affected by the work of construction shall be corrected to comply with the bracing and anchorage requirements of currently effective regulations.
- (c) Required Structural Rehabilitation. Existing school buildings for which a reconstruction, alteration or addition project is proposed shall be retrofitted as required to conform to currently effective regulations, under the following conditions:
- 1. When the cost of the reconstruction, alteration, or addition project exceeds \$25,000 and 50 percent of the replacement value of the existing building. Maintenance work and air-conditioning equipment and insulation materials costs need not be included in the percentage of replacement value calculation. For purposes of this section, the cost of the reconstruction, alteration, or addition project shall not include the cost of structural rehabilitation.
- 2. When the cost of the reconstruction, alterations, or addition project exceeds \$25,000 but does not exceed 50 percent of the replacement value of the existing building and the proposed modifications, either:
  - A. Increase the existing lateral force story shear in any story by more than 5 percent, or
  - B. Reduce the lateral-force-resisting capacity in any story or in the total building by no less than 5 percent.

EXCEPTION: Rehabilitation of the building is not required under Section 4-309 (c) 2 (A) when the lateral story shear design load requirements under which the building was originally certified is greater than the lateral seismic load for the altered building under currently effective regulations.

- (d) Other Requirements. Individual lines of lateral forceresisting elements which are to be altered or which are to be affected by other modifications shall be analyzed to determine the effects of increased loading and/or reduced capacity. The analysis shall show that the affected portion of the structure complies with Section 4-309 (a) or (c) as appropriate.
- (e) When structural damage due to an earthquake is repaired, all portions of the structure associated to this damage shall be retrofitted to comply with currently

#### effective regulations.

Authority: Education Code Sections 17310 and 81142. Reference: Education Code Sections 17280, 17294, 81130, 81132 and 81133.

\* \* \*

ITEM 2 OSHPD 4/02 Part 1

Section 7-125, 7-129, 7-135, 7-141, 7-155, 7-203, 7-2100, 7-2101, 7-2102, 7-2103, 7-2104, 7-2105 & 7-2106

Chapter 7. Safety Standards for Health Facilities Article 3. Approval of Plans and Specifications

#### **SUB-ITEM 2-1**

7-125. Final Review of Plans and Specifications.

•••

- (d) After the Office has made its check of the submitted documents ....
- (e) Before the Office's written approval of the plans and specifications is issued, a set of prints of the stamped plans and specifications must be submitted to the Office. The architect or engineer shall submit to the Office a set of plans and specifications bearing the identification stamp of the Office. Upon receipt of this set, the Office shall provide written approval of the plans and specifications.

Any changes made to the approved plans or specifications shall be made in accordance with Section 7-153. Any change, erasure, alteration or modification not made in accordance with Section 7-153 of any plan or specification bearing the identification stamp of the Office shall void the approval of the application. However, the written approval of plans may be extended to include revised and/or additional plans and specifications after submission for review and approval thereof.

(END OF ITEM)

#### SUB-ITEM 2-2

#### 7-129. Time Limitations for Approval

Final plans and specifications shall be submitted to the Office ....

The procedures leading to obtaining written approval of final plans ....

(c) Construction, in accordance with approved plans and

specifications, shall commence within one year after obtaining the written approvals of plans and specifications provided in Section 7-135(a), or this approval shall become void. The Office may require that the plans and specifications be revised to meet current regulations before reinstating a voided approval.

Authority: Health and Safety Code Section 129850. Reference(s): Health and Safety Code Sections 129675-130070.

(END OF ITEM)

#### **SUB-ITEM 2-3**

Chapter 7. Safety Standards for Health Facilities
Article 4. Construction

7-135. Time of Beginning Construction.

- (a) Construction shall not commence until the health facility has applied for and obtained from the Office:
- 1. Written approval of the plans and specifications.
- 2. A building permit.
- Written approval of the inspector of record testing, inspection and observation program.

Note: See Infection Control Program provisions of Title 22, Section 70739 (b).

Authority: Health & Safety Code Section 129850 Reference(s): Health & Safety Code Sections 129675 -130070

(END OF ITEM)

#### SUB-ITEM 2-4

7-141. Administration of Construction

...

(f) The testing inspection program shall include a completed application for inspector(s) of record for the project. If a project has more than one inspector of record, the distribution of responsibilities for the work shall be clearly identified for each inspector of record. The inspection program shall also identify all special inspections to be performed on the project and the individual(s) to perform the inspections. The special inspections shall include, at a minimum, those special inspections required be applicable sections of the California Building Standards Code.

. . . .

Authority: Health & Safety Code Section 129850 Reference(s): Health & Safety Code Sections 129675 -130070

\* \* \*
(END OF ITEM)

#### SUB-ITEM 2-5

#### 7-155. Final Approval of the Work.

- (a) The Office shall schedule a final state agency inspection of the work subsequent to the receipt of the responsible architect's or engineer's statement that the contract is performed or substantially performed.
- (b) The final approval of the construction shall be issued by the Office when:
- 1. All work has been completed in accordance with the approved plans and specifications.
- 2. The required verified compliance reports and test and inspection affidavits reports have been filed with the Office.
- 3. All remaining fees have been paid to the Office.

Authority: Health & Safety Code Sections 129850 Reference(s): Health & Safety Code Sections 129675-130070

(END OF ITEM)

#### **SUB-ITEM 2-6**

Chapter 7. Safety Standards for Health Facilities
Article 19. Certification & Approval of Hospital
Inspectors

#### 7-203. Applying for the Certification Examination.

- (a) An applicant may apply for the Hospital Inspector Certification Exam by submitting, to the Office, the following items prior to the final filing date announced for a scheduled exam:
- 1. A completed original application, provided by the Office, shall be submitted to the Office in Sacramento and shall include the exam title, preferred examination location, applicant's name, mailing address and telephone number.
- 2. Certificates, affidavits, or transcripts indicating educational courses completed by the applicant which relate to the minimum qualifying requirements stated in Section 7-204.
- Work verification form ....

Authority: Health & Safety Code Sections 129825 and 129850

Reference(s): Health & Safety Code Sections 129825 and

Reference(s): Health & Safety Code Sections 129825 and 129850

(END OF ITEM)

#### SUB-ITEM 2-7

Chapter 7. Safety Standards for Health Facilities Article 21. Plan Review, Building Inspection and Certification of Surgical Clinics, Chronic Dialysis Clinics and Outpatient Services Clinics

#### 7-2100. Scope of Responsibilities.

- (a) Except as otherwise provided in these regulations, a city or county building jurisdiction shall be responsible for plan review, and building inspection and certification of new construction or alteration of clinic facilities specified in 7-2100 (a) (1), (2) and (3) and (4) and for buildings-converted to purpose specified in (a) 1, 2 or 3 and shall also provide certification that the clinic facilities identified in 7-2100(a) (1), (2) and (3) are in conformance with the applicable clinic provisions in the latest edition of the California Building Standards Code f. For clinic facilities identified in 7-2100(a) (1), (2) or (3) construction or alteration shall include buildings converted to the specific purpose.
- 1. Surgical clinic as defined in Health and Safety Code, Section 1204(b)(1).

- 2. Chronic dialysis clinic as defined in Health and Safety Code, Section 1204(b)(2).
- 3. Surgical and/or chronic dialysis clinic building which is freestanding from a building where hospital services are provided and as defined in Health and Safety Code, Section 129725(b)(1).
- 4. Any building where hospital outpatient clinical services are provided that is freestanding from a hospital building, as defined in Health and Safety Code, Section 129725(a), except those buildings identified in 7-2100(a) (3).
- (b) The city or county shall not establish or apply building standards for the construction or alteration of hospital licensed freestanding clinics, as described in Section 7-2100(a) (3) and (4) which are more restrictive or comprehensive than comparable building standards established or applied to clinic facilities which are not hospital licensed pursuant to Health and Safety Code, Chapter 1 (commencing with Section 1200) of Division 2.

## 7-2101. Surgical Clinic and Chronic Dialysis Clinic Project Submittal to the Local Building Jurisdiction.

(a) The governing authority or owner of a clinic, as described in Section 7-2100(a)(1) and (2), shall submit construction plans to the city or county, as applicable, for plan review, building inspection and certification. Certification by the local building jurisdiction shall indicate that the project clinic is in conformance with the applicable clinic standards, as propounded by the office, in provisions in the latest edition of the California Building Standards Code.

**EXCEPTION:** Notwithstanding Section 7-2100(a)(1) and (2), the governing authority or owner may request the Office to perform the plan review and certification, pursuant to Section 7-2102.

- (b) Upon the clinic's initial submittal of project plans, the city or county shall advise the governing authority or owner, in writing, of its decision that plan review services will either include certification or not include certification.
- (c) If the city or county indicates to the governing authority or owner that it will include certification with plan review of the specified clinic project, the city or county shall:
- 1. Review plans to <u>all applicable clinic-provisions of in</u> the latest edition of the California Building Standards Code and;
- 2. Provide written certification to the applicant within 30 days of completion of construction that indicating whether or not the applicable building clinic provisions

#### standards have been met.

- (d) If the city or county indicates to the applicant that it will not include certification with plan review of the specified clinic project, the city or county shall review the plans to the provisions of the latest edition of the California Building Standards Code, excluding the clinic provisions. the governing authority or owner shall also submit the following items to the Office for plan review and certification:
- 1. A completed application, design plans and specifications for the clinic project, pursuant to Section 7-113. and:
- 2. A fee, pursuant to Section 7-2106.
- (e) The Office shall review the plans and specifications to determine whether or not the clinic project meets the applicable clinic provisions in the latest edition of the California Building Standards Code.
- (e) (f) Upon completion of plan review and submittal receipt of all applicable fees, the Office shall provide the clinic applicant with written certification that the project design plans and specifications either meet or do not meet the applicable standards, as propounded by the Office, in clinic provisions in the latest edition of the California Building Standards Code.
- (g) Building construction inspection for the clinic project shall be performed by the local jurisdiction.

## 7-2102. Request for the Office to Provide Plan Review for Surgical Clinics and Chronic Dialysis Clinics.

- (a) If the hospital governing authority or owner of a clinic, as described in Section 7-2100(a) (1) and or (2), elects to request the Office to provide plan review services for a clinic project, in lieu of the city or county, the request shall be submitted to the Office in writing. The Office will consult with the applicable local building jurisdiction prior to acceptance or non-acceptance of the plan review request and subsequently notify the clinic, in writing, of its decision.
- (b) If the Office agrees to provide plan review and certification services for the governing authority or owner, the applicant shall submit the following items to the Office:
- A completed application, design plans and specifications for the clinic project, pursuant Section 7-113, and;
- 2. A fee, pursuant to Section 7-2106.
- (c) The Office shall review the plans to all applicable

provisions in the latest edition of the California Building Standards Code.

(e) (d) Upon completion of plan review and submittal receipt of all applicable fees, the Office shall provide the applicant with written certification that the project design plans and specifications either meet or do not meet the latest applicable clinic provisions in the latest edition of standards, as propounded by the Office, in the California Building Standards Code.

(d) (e) Building construction inspection for the project clinic shall be performed by the local building jurisdiction<sub>5</sub>. <u>T</u>therefore, the governing authority or owner shall submit to the city or county applicable project documents required for these building inspection services.

## 7-2103. <u>Hospital</u> Outpatient Services Clinic Project Submittal to Local Building Jurisdiction.

- (a) The hospital governing authority or owner of a +freestanding outpatient services clinic, as described in Section 7-2100(a) (3) or (4), shall submit construction plans to the city or county, as applicable, for plan review and building inspection and certification, pursuant to this section or may request the Office to perform plan review, and building inspection and certification, pursuant to Section 7-2104. Certification by the local building jurisdiction shall indicate that the project clinic is in conformance with the applicable clinic standards, as propounded by the Office, in the California Building Standards Code. Certification by the local building jurisdiction that the project clinic is in conformance with the applicable clinic provisions in the latest edition of the California Building Standards Code is also required for clinics described in 7-2100(a) (3).
- (b) If the hospital governing authority or owner of a clinic, as described in Section 7-2100(a)(3), initially submits clinic plans to the city or county for plan review, the city or county shall respond to the clinic owner, in writing, stating its decision of whether or not the plan review will include certification.
- (c) If the city or county indicates to the hospital governing authority or owner that it will include certification with plan review of the specified clinic project, the city or county shall:
- 1. Review plans to latest all applicable clinic provisions, as amended by the Office, in the latest edition of the California Building Standards Code and;
- 2. Provide written certification to the applicant within 30 days of completion of construction that indicating whether or not the applicable building clinic provisions

#### standards have been met.

- (d) If the city or county indicates to the hospital governing authority or owner that it will not include certification with plan review of the specified clinic project, the city or county shall review the plans to the provisions of the latest edition of the California Building Standards Code, excluding the clinic provisions. The applicant shall also submit the following items to the Office for plan review and certification:
- 1. A completed application, design plans and specifications for the clinic project, pursuant to Section 7-113. and:
- 2. A fee, pursuant to Section 7-2106.
- (e) The Office shall review the plans and specifications for certification to determine whether or not the clinic project meets the applicable clinic provisions in the latest edition of the California Building Standards Code
- (e) (f) Upon completion of plan review and submittal receipt of all applicable fees, the Office shall provide the clinic applicant with certification that the project design plans and specifications either meet or do not meet the applicable clinic provisions standards, as propounded by the Office, in the latest edition of the California Building Standards Code.
- (f) (g) Building construction inspection for the project clinic shall be performed by the local building jurisdiction, therefore, the governing authority or owner shall submit to the city or county applicable project documents required for these building inspection services.

## 7-2104. Plan Review and Building Inspection by the Office for <u>Hospital</u> Outpatient Services Clinics.

- (a) If the hospital governing authority or owner of a clinic, as described in Section 7-2100(a)(3) or (4), requests that the Office perform plan review and building inspection for a clinic project, in lieu of the city or county performing these services, the request shall be submitted to the Office in writing. The Office will provide a written response to the hospital indicating the decision to provide or not provide the requested services. If the Office does not agree to provide plan review and building inspection\_as requested, the city or county shall conduct these services.
- (b) Upon the Office's acceptance to provide plan review and building inspection for a clinic project, the hospital governing authority or owner shall submit the following items to the Office:
- 1. A completed application, design plans and specifications for the clinic project, pursuant to Section

7-113 and:

- 2. A fee, pursuant to Section 7-2106.
- (c) For clinic facilities described in Section 7-2100(a) (3), Uupon completion of the building construction and submittal receipt of all applicable fees, the Office will provide certification that the plans and construction comply with the applicable provisions in the California Building Standards Code, including model code provisions.
- (d) A clinic building which has been accepted by the Office, pursuant to paragraph (a) of this section, shall remain under the jurisdiction of the Office for plan review and building inspection of any subsequent alterations, unless the hospital governing authority or owner submits written notification to the Office, requesting the applicable city or county building jurisdiction to conduct plan review and building inspection for subsequent construction projects of the specified clinic.

## 7-2105. "Hospital Building" Designation of a Freestanding Hospital-owned Clinic.

- (a) A building which is under the Office's jurisdiction, pursuant to Section 7-2104(d) may be designated as a "hospital building" by the hospital governing authority or owner under the following conditions:
- 1. The hospital governing authority or owner submits written notification to the Office indicating the determination to designate the building as a "hospital building" and;
- 2. The subject building remains under the jurisdiction of the Office for plan review and building inspection.
- (b) A building designated as a "hospital building.", pursuant to Section 7-2105(a), shall be reviewed and inspected to verify in-compliance with the standards and requirements for a hospital building, as defined in ef Health and Safety Code, Part 7, Chapter 1, (commencing with Section 129675).

#### 7-2106. Fees for Review of Specified Clinics.

(a) Fees for plan review services of clinic buildings described in Section 7-2100(a)(1), (2) and (3), shall be in an amount not to exceed the actual cost of performing the services.

**EXCEPTION:** When the Office accepts a request from the hospital governing authority or owner to perform plan review and building inspection services for those buildings described in Section 7-2100(a)(3), the fee requirements of Section 7-133 (a)(1) which apply to hospital buildings shall also apply to the project building.

(b) When the Office accepts a request from the hospital governing authority or owner to perform plan review and building inspection services for those buildings described in Section 7-2100(a) (4). The fee requirements of Section 7-133(a) (1) which apply to hospital buildings shall also apply to the project buildings.

(b) (c) Fees shall be paid as follows:

- 1. A non-refundable deposit of \$250.00 shall accompany the application for plan review. This deposit will be added to the total fees due for the project.
- 2. After a preliminary review of the required documents received and determination of the services to be performed, the Office will provide an estimate of the total review fee due based on costs to be incurred.
- 3. The applicant shall submit payment of the estimated fee prior to start of the plan review and building inspection services.
- 4. If during the review/inspection process it appears that actual costs will exceed the estimate by more than five percent (5%), the applicant will be informed that additional fees, not to exceed the actual cost will be due and payable immediately upon project completion.
- 5. All applicable fees for a completed project shall be paid prior to certification by the Office.
- (c) <u>6.</u> Fees received for a project, which are in excess of five percent (5%) of <u>exceed</u> the actual cost for performing plan review and inspection services <u>by more</u> than five percent (5%), will be refunded by the Office.

Notation

Authority: Health & Safety Code Section 129850 Reference(s): Health & Safety Code Sections 1226, 129785 and 129885

## Part 2 California Building Code

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ITEM 3 SFM 3/02 Part 2, Chapter 10, Section 1007.5.11

#### **EXPRESS TERMS**

{The California Building Standards Commission has continued the use of the 1998 California Building Code (CBC), as based on the 1997 Uniform Building Code with the intent of republishing such code as the 2001 CBC.

The SFM is proposing to amend an existing SFM amendment as published in the 2001 CBC. The proposed language shown below will prohibit patient treatment room doors from swinging into the required width of corridors. The existing text of the 2001 CBC prohibits patient sleeping room doors from swinging into the required clear width of corridors.}

Chapter 10 - Means of Egress

SECTION 1007.5 — Group I Occupancies

## 1007.5.11 [For SFM] Swing of patient <u>and treatment</u> room doors.

Entrance doors to patients' bedrooms <u>and treatment</u> <u>rooms</u> from corridors of Group I, Divisions 1.1 and 1.2 Occupancies shall not swing into the required width of corridors.

Authority Cited-Health and Safety Code Section 13143. Reference-Health and Safety Code Section 13143(a).

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ITEM 4
DSA/SS 3/02
Part 2
Chapter 16A, 22A, and 16B, Division IV

#### **EXPRESS TERMS**

#### **SUB-ITEM 4-1**

Section 1627A - Amend Section 1627A as follows:

#### **SECTION 1627A - DEFINITIONS**

For the purposes of this division, certain terms are defined as follows:

. . . .

INCIDENTAL STRUCTURAL ALTERATIONS OR

**ADDITIONS** are alterations or additions which would not reduce the story lateral shear force-resisting capacity by more than 5 percent or increase the story shear by more than 5 percent in any existing story.

. . . .

IRREGULAR STRUCTURE is a structure designated as having one or more plan or vertical irregularities.

. . . .

**LATERAL-FORCE-RESISTING SYSTEM** is that part of the structural system designed to resist the Design Seismic Forces.

. . . .

(END OF ITEM)

#### SUB-ITEM 4-2

Section 1629A.8 - Amend Section 1629A.8 as follows:

1629A.8 Selection of Lateral-force Procedure.

**1629A.8.1 General.** Any structure may be, and certain structures defined below shall be, designed using the dynamic lateral- force procedures of Section 1631A.

• • • •

**1629A.8.3 Static.** The static lateral force procedure of Section 1630A may be used for the following structures:

- 1. Not adopted by the State of California DSA.
- 2. Regular structures under 240 feet (73 152 mm) in height with lateral force resistance provided by systems listed in Table 16A-N, except where Section 1629A.8.4, Item 4, applies.
- 3. Irregular structures with flexible diaphragms not more

than three stories or 30 feet (9144 mm) in height.

- 4. Structures having a flexible upper portion supported on a rigid lower portion where both portions of the structure considered separately can be classified as being regular, the average story stiffness of the lower portion is at least 10 times the average story stiffness of the upper portion and the period of the entire structure is not greater than 1.1 times the period of the upper portion considered as a separate structure fixed at the base.
- 5. Wood-frame structures having wood shear walls and wood diaphragms.
- 6. Irregular structures with reentrant corners, plan irregularity Type 2, Table 16A-M, which are otherwise eliqible for static analysis.
- **1629A.8.4 Dynamic.** The dynamic lateral-force procedure of Section 1631A shall be used for all other structures, including the following:
- 1. Structures 240 feet (73 152 mm) or more in height.
- 2. Structures having a stiffness, weight or geometric plan or vertical irregularity of Type 1, 2 or 3, as defined in Table 16A-L or 16A-M, or structures having irregular features not described in Table 16A-L or 16A-M, except as permitted by <u>Section 1629A.8.3 and Section 1630A.4.2</u>.
- 3. Structures over five stories or 65 feet (19 812 mm) in height in Seismic Zones 3 and 4 not having the same structural system throughout their height except as permitted by Section 1630A.4.2.
- 4. Structures, regular or irregular, except those defined in Section 1629A.8.3, Items 3 and 5, located on Soil Profile Type  $S_F$ , that have a period greater than 0.5 second as calculated in accordance with Method B in Section 1630A.2.2. The analysis shall include the effects of the soils at the site and shall conform to Section 1631A.2. Item 4.

. . . .

SUB-ITEM 4-3

(END OF ITEM)

Section 1629A.9 - Amend Section 1629A.9 as follows:

1629A.9 System Limitations.

**1629A.9.1 Discontinuity.** Structures with a discontinuity in capacity, vertical irregularity Type 5 as defined in Table 16A-L, <u>are not permitted.</u> shall not be over two stories or 30 feet (9144 mm) in height where the weak story has a calculated strength of less than 65 percent

of the story above.

**EXCEPTION:** Where the weak story is capable of resisting a total lateral seismic force of  $S_{\varphi}$  times the design force prescribed in Section 1630A.

. . . .

1629A9.2 Undefined structural systems.... 1629A.9.3 Irregular features....

<u>1629A.9.4 Severe Soft Story.</u> Structures with a Severe Soft Story vertical irregularity Type 1b, as defined in Table 16A-L, are not permitted.

<u>1629A.9.5</u> Severe torsional irregularity. Structures with a severe torsional irregularity, plan irregularity Type 1b, as defined in Table 16A-M are not permitted, if  $N_a$  or  $N_v$  is greater than 1.0.

. . . .

(END OF ITEM)

#### **SUB-ITEM 4-4**

Section 1630A.2.2 - Amend Section 1630A.2.2 as follows:

**1630A.2.2 Structure Period.** The value of *T* shall be determined from one of the following methods:

1. Method A: For all buildings, the value of T may be approximated from the following formula:

$$T_A = C_t (h_n)^{\frac{3}{4}} T_A = \frac{C_t (h_n)^{\frac{3}{4}}}{IN_v}$$

(30A-8)

WHERE:

. . . .

(END OF ITEM)

#### **SUB-ITEM 4-5**

Section 1630A.4 - Amend Section 1630A.4 as follows:

1630A.4 Combinations of Structural Systems.

• • • •

**1630A.4.1 General.** Where combinations of structural systems are incorporated into the same structure, the requirements of this section shall be satisfied.

**1630A.4.2 Vertical combinations.** The value of R used in the design of any story shall be less than or equal to

the value of *R* used in the given direction for the story above.

**EXCEPTION:** This requirement need not be applied to a story where the dead weight above that story is less than 10 percent of the total dead weight of the structure.

Structures may be designed using the procedures of this section under the following conditions:

- 1. The entire structure is designed using the lowest R of the lateral-force-resisting systems used, or
- 2. The following two <u>Two</u>-stage static analysis procedures may be used for structures conforming to Section 1629A.8.3, Item 4. <u>providing the structure</u> complies with the following:
- 2.1 The flexible upper portion shall be designed as a separate structure, supported laterally by the rigid lower portion, using the appropriate values of *R* and *D*.
- 2.2 The rigid lower portion shall be designed as a separate structure using the appropriate values of R and D. The reactions from the upper portion shall be those determined from the analysis of the upper portion amplified by the ratio of the  $(R/\Delta)$  of the upper portion over  $(R/\Delta)$  of the lower portion. This ratio shall not be less than one.
- 2.3 Where design of elements of the upper portion are governed by special seismic load combinations, the special loads shall be considered in the design of the lower portion.
- 2.4 The lower portion shall have a stiffness at least 10 times the upper portion.
- 2.5 The period of the entire structure shall not be greater than 1.1 times the period of the upper portion considered as a separate structure fixed at the base.
- 2.6 The detailing requirements required by the lateral system of the upper portion shall be used for structural components common to the structural system of lower portion.
- 2.7 If separate models are used to design the upper and lower portions, the model boundary conditions of the upper portion shall be compatible with actual strength and stiffness of the supporting elements of the lower portion.

. . . .

#### **SUB-ITEM 4-6**

Section 1630A.7 - Amend Section 1630A.7 as follows:

**1630***A***.7 Horizontal Torsional Moments.** Provisions shall be made for the increased shears resulting from horizontal torsion where diaphragms are not flexible. The most severe load combination for each element shall be considered for design.

. . .

Where torsional irregularity exists, as defined in Table 16<u>A</u>-M, the effects shall be accounted for by increasing the accidental torsion at each level by an amplification factor,  $A_x$ , determined from the following formula:

$$A_{x} = \left[\frac{\Delta_{\text{max}}}{1.2\Delta_{avg}}\right]^{2}$$

(30A-16)

#### WHERE:

 $\Delta_{avg}$  = the average of the <u>interstory</u> drift at the extreme points of the structure at Level x.

 $\Delta_{max}$  = the maximum <u>interstory</u> drift at Level x.

. . . .

(END OF ITEM)

#### **SUB-ITEM 4-6.1**

Section 1630A.10

Amend Section 1630A.10 as follows:

1630A.10 Story Drift Limitation

1630A.10.1 General...

**1630A.10.2 Calculated.** Calculated story drift using  $\underline{\Delta}_M$  shall not exceed 0.025 times the story height for structures having a fundamental period of less than 0.7 second. For structures having a fundamental period of 0.7 second or greater, the calculated story drift shall not exceed 0.020 times the story height.

**EXCEPTIONS:** 1. These drift limits may be exceeded when it is demonstrated that greater drift can be tolerated by both structural elements and nonstructural elements that could affect life safety <u>or continued operation</u>. The drift used in this assessment shall be based upon the Maximum Inelastic Response Displacement,  $\Delta_M$ .

2. There shall be no drift limit in single-story steelframed structures classified as Groups B, F and S Occupancies or Group H, Division 4 or 5 Occupancies. In Groups B, F and S Occupancies, the primary use

## (END OF ITEM)

#### **SUB-ITEM 4-7**

Section 1631A.3 - Amend Section 1631A.3 as follows:

1631A.3 Mathematical Model. A mathematical model of the physical structure shall represent the spatial distribution of the mass and stiffness of the structure to an extent that is adequate for the calculation of the significant features of its dynamic response. A three-dimensional model shall be used for the dynamic analysis of structures with highly irregular plan configurations such as those having a plan irregularity defined in Table 16A-M and having a rigid or semi rigid diaphragm. The stiffness properties used in the analysis and general mathematical modeling shall be in accordance with Section 1630A.1.2. The mathematical model of buildings with diaphragm discontinuities, as defined in Table 16A-M, Item 3, shall explicitly include the effect of diaphragm stiffness.

## (END OF ITEM)

#### **SUB-ITEM 4-8**

Section 1631A.5.4 - Amend Section 1631A.5.4 as follows:

**1631A.5.4 Reduction of Elastic Response Parameters for design.** Elastic Response Parameters may be reduced for purposes of design in accordance with the following items, with the limitation that in no case shall the Elastic Response Parameters be reduced such that the corresponding design base shear is less than the Elastic Response Base Shear divided by the value of *R* or the values of  $V_{sc}$  defined in Item 4.

- 1. For all regular structures, \* \* \* Elastic Response Parameters may be reduced such that the corresponding design base shear is not less than 100 percent of the base shear determined in accordance with Section 1630A.2.
- 2. Not adopted by the State of California.

3. [For OSHPD 1 & 4 and DSA/SS] For irregular structures with vertical irregularity Types 1a, 2, or 5, as defined in Table 16A-L, or irregular structures with plan irregularity Type 1b as defined in Table 16A-M, Elastic Response Parameters, may be reduced such that the corresponding design base shear is not less than 125 percent of the base shear

determined in accordance with Section 1630A.2.

Exception: The Elastic Response Parameters for structures with Vertical Irregularity Types 1a or 2 as defined in Table 16A-L, or plan irregularity Type 1b as defined in Table 16A-M may be reduced such that the corresponding design base shear is not less than 100 percent of the base shear determined in accordance with Section 1630A.2, if no interstory drift ratio under design lateral load is greater than 130 percent of the interstory drift ratio of the story immediately above. Torsional effects need not be considered in the calculation of story drifts for the purposes of this determination. The story drift ratio relationships for the top two stories of the structures are not required to be evaluated.

3. For all irregular structures, \* \* \* Elastic Response

Parameters may be reduced such that the corresponding design base shear is not less than 125 percent of the base shear determined in accordance with Section 1630A.2.

- 3. For all other structures, Elastic Response
  Parameters may be reduced such that the
  corresponding design base shear is not less than
  100 percent of the base shear determined in
  accordance with Section 1630A.2.
- 4. The base shear  $V_{sc}$  is determined from the following formula:

$$\frac{V_{sc} = V(SR)}{(31A-1)}$$

#### WHERE:

SR = the spectral ratio determined by the following formula:

$$SR = \frac{\sum_{m=1}^{n} (MPE_m PM_m)}{\sum_{m=1}^{n} (CBC_m PM_m)}$$
(31A-2)

V = the total design base shear calculated in accordance with Formula (30A-4).

#### WHERE:

CBC<sub>sr</sub>= spectral acceleration determined from the design response spectrum given in Figure 16A-3 for the appropriate soil type at the period of the mth mode.

MPE<sub>m</sub>= spectral acceleration of the site-specific maximum probable earthquake spectrum (5 percent damping) at the period of the mth mode. The value of MPE<sub>m</sub> need not exceed 1.5. number of significant modes required for at

participate in the direction of interest.

<u>PM<sub>m</sub> = fraction of total building mass participating in the</u> <u>mth mode in the direction of interest.</u>

The design base shear shall not be taken as less than  $V_{sc}$ , unless justification is provided to substantiate a level of safety equivalent to structural designs at other sites and meeting the requirements of Section 1631A.2, Item 6.

The corresponding reduced design seismic forces shall be used for design in accordance with Section 1612*A*.

(END OF ITEM)

#### SUB-ITEM 4-9

Section 1632A.6 - Amend Section 1632A.2.6 as follows:

1632A.6 HVAC Ductwork, Plumbing/Piping and Conduit Systems. All pipes, ducts and conduit shall be braced to resist the forces prescribed in Section 1630A.2. 1632A. Ductwork shall be constructed in accordance with provisions contained in Part 4, Title 24, California Mechanical Code. Pipes and their connections constructed of ductile materials (copper. ductile iron, steel or aluminum) with brazed or welded connections shall have brace spacing not exceeding that specified in Section <del>1630A.5</del> 1632A.5 or other standards approved by the enforcement agency. Pipes and their connections, constructed of nonductile materials (e.g., cast iron, no-hub pipe and plastic) or with screwed connections, shall have the brace spacing reduced to one-half of the spacing allowed for ductile material in accordance with Section 1630A.5 or other standards approved by the enforcement agency.

Seismic restraints may be omitted for the following conditions, where flexible connections are provided between components and the associated ductwork, piping, and conduit:

- 1. Fuel, medical gas, and vacuum piping less than 1 inch (25 mm) inside diameter.
- 2. All other piping less than 2.5 inches (64 mm) diameter, except medical gas including vacuum piping, or

All piping suspended by individual hangers 12 inches (305 mm) or less in length from the top of the pipe to the bottom of the structural support for the hanger. Rod hangers shall not be constructed in a manner that would subject the rod to bending moments. or

All electrical conduit less than 2.5 inches (64 mm) trade size.

3. All rectangular air-handling ducts less than 6 square feet (0.56 m2) in cross-sectional area, or

All round air-handling ducts less than 28 inches (711 mm) in diameter, or

All ducts suspended by hangers 12 inches (305 mm) or less in length from the top of the duct to the bottom of the structural support for the hanger, where the hangers are detailed to avoid bending of the hangers and their connections.

Where lateral restraints are omitted, the piping, ducts, or conduit shall be installed such that lateral motion of the piping, or duct, or conduit will not cause damaging impact with other systems or structural members, or loss of vertical support.

. . . .

(END OF ITEM)

#### **SUB-ITEM 4-10**

#### WITHDRAWN BY DSA/SS

#### SUB-ITEM 4-11

**Section 1633A.2.13.1** Amend Section *1633A.2.13.1* to the following:

1633.A.2.13.1 The design of guide rail support-bracket fastenings and the supporting structural framing shall be in accordance with Section 3030 (k), Part 7, Title 24, using the weight of the counterweight or maximum weight of the car plus not more than 40 percent of its rated load. The seismic forces shall be assumed to be distributed one third to the top guiding members and two thirds to the bottom guiding members of cars and counterweights, unless other substantiating data are provided. Minimum seismic forces shall be 0.5g acting in any horizontal direction, using allowable stress design.

Retainer plates are required for both car and counterweight, designed in accordance with Section 3032 (c), Part 7, Title 24, California Code of Regulations. Retainer plates are required at the top and bottom of the car and counterweight, except where safety devices acceptable to the enforcement agency are provided which meet all requirements of the retainer plates, including full engagement of the machined portion of the rail. The design of the car and counterweight guide rails

for seismic forces shall be based on the following requirements:

1. The lateral forces <u>using allowable stress design</u> shall be based on horizontal acceleration of 0.5g for all buildings.

...

6. Cab stabilizers and counterweight frames shall be designed to withstand a lateral load equal to 0.5g using allowable stress design

(END OF ITEM)

#### **SUB-ITEM 4-12**

Table 16A-L Amend Table 16A-L as follows:

## TABLE 16A-L—VERTICAL STRUCTURAL IRREGULARITIES

IRREGULARITY TYPE AND DEFINITION	REFERENCE SECTION
1 <u>a</u> . Stiffness irregularity- soft story A soft story is one in which the lateral stiffness is less than 70 percent of that in the story above or less than 80 percent of the average stiffness of the three stories above.	1629 <i>A</i> .8.4, Item 2
1b. Severe Soft Story  A severe soft story is one in which the lateral stiffness is less than 60 percent of that in the story above or less than 70 percent of the average stiffness of three stories above.	<u>1629A.9.4</u>
2. Weight (mass) irregularity Mass irregularity shall be considered to exist where the effective mass of any story is more than 150 percent of the effective mass of an adjacent story. A roof that is lighter than the floor below need not be	1629 <i>A</i> .8.4, Item 2

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considered.	
3. Vertical geometric irregularity Vertical geometric irregularity shall be considered to exist where the horizontal dimension of the lateral-force-resisting system in any story is more than 130 percent of that in an adjacent story. One-story penthouses need not be considered.	1629 <i>A</i> .8.4, Item 2
4. In-plane discontinuity in vertical lateral-force-resisting element An in-plane offset of the lateral-load-resisting elements greater than the length of those the elements below.	1630 <i>A</i> .8.2
5. Discontinuity in capacity-weak story A weak story is one in which the ratio of the story strength to the story shear is less than 80 percent of that in the story above. The story strength is the strength of all seismic-resisting elements sharing the story shear for the direction under consideration. The load deformation characteristics of the elements shall be considered so that the strength is determined for compatible deformations.	1629 <i>A</i> .9.1

SUB-ITEM 4-13
Table 16A-M-Amend Table 16A-M as follows:
TABLE 16A-M—PLAN STRUCTURAL IRREGULARITIES

IRREGULARITY TYPE AND DEFINITION	REFERENCE SECTION
1 <u>a</u> . Torsional irregularity-to be considered when diaphragms are not flexible Torsional irregularity shall be considered to exist when the maximum story drift, computed including accidental torsion, at one end of the structure transverse to an axis is more than 1.2 times the average of the story drifts of the two ends of the structure.	1633A.1 1633A.2.9, Item 6
1b. Severe torsional irregularity-to be considered when diaphragms are not flexible Severe torsional irregularity shall be considered to exist when the maximum story drift, computed including accidental torsion, at one end of the structure transverse to an axis is more than 1.4 times the average of the story drifts of the two ends of the structure.	<u>1629A.9.5</u> <u>1631B.2.9,</u> <u>Item 6</u>
2. Reentrant corners Plan configurations of a structure and its lateral force-resisting system contain reentrant corners, where both projections of the structure beyond a reentrant corner are greater than 15 percent of the plan dimension of the structure in the given direction.	1633A.2.9, Items 6 and 7
3. Diaphragm discontinuity Diaphragms with abrupt discontinuities or variations in stiffness, including those having cutout or open areas greater than 50 percent of the gross enclosed area of the diaphragm, or changes in effective diaphragm stiffness of more than 50 percent from one story to the next.	1633A.2.9, Item 6
4. Out-of-plane offsets Discontinuities in a lateral force path, such as out-of-plane offsets of the	1630A.8.2; 1633A.2.9, Item 6;

vertical elements.	2213A.9.1
5. Nonparallel systems  The vertical lateral load-resisting elements are not parallel to or symmetric about the major orthogonal axes of the lateral force-resisting system.	1633A.1

(END OF ITEM)

#### SUB-ITEM 4-14

Section 2210A - Amend Section 2210A as follows:

#### **SECTION 2210A - ADOPTION**

Except for the modifications as set forth in Section 2211A of this Division and the requirements of the building code, the seismic design, fabrication, and erection of structural steel shall be in accordance with the Seismic Provisions for Structural Steel Buildings, April 15, 1997 published by the American Institute of Steel Construction, 1 East Wacker Drive, Suite 3100, Chicago, IL 60601, including Supplement No. 42 dated February 15, 1999 November 10, 2000.

\* \* \*
(END OF ITEM)

#### **SUB-ITEM 4-15**

Section 2211A - Amend Section 2211A as follows:

#### **SECTION 2211A - AMENDMENTS**

The Seismic Provisions for Structural Steel Buildings, hereinafter referred to as AISC Seismic 97, shall include only Part I (LRFD) and Appendix S. Where other codes, standards, or specifications are referred to in AISC Seismic 97 they are considered as supplemental standards and only considered guidelines subject to the approval of the enforcement agency.

#### 1. Part I, Glossary. Add the following:

Rapid Strength Deterioration: A mode of behavior characterized by a sudden loss of strength. In a cyclic test with constant or increasing deformation amplitude, a loss of strength of more than 50 percent of the strength attained in the previous excursion in the same

loading direction.

- 2. Part I, Glossary. Ordinary, and Intermediate, and Special Truss Moment Frame (OMF, and IMF and STMF).
- 3. Part I, Section 7.3c amend this section to read as follows:

For members and connections that are part of the Seismic Force Resisting System, discontinuities located within a plastic hinging zone as defined in Section 7.4a, created by errors or by fabrication or erection operations, such as tack welds, erection aids, air-arc gouging, and thermal cutting, shall be repaired as required by the Engineer of Record and approved by DSA.

- 34. Part I, Section 9.2 amend to read as the following:
- 9.2. Beam-to-Column Joints and Connections
- 9.2a. The design of all beam-to-column joints and connections used in the Seismic Force Resisting System shall be based upon qualifying cyclic test results in accordance with Appendix S that demonstrate an interstory drift angle of at least 0.04 radians and an inelastic rotation of at least 0.03 radians. Qualifying test results shall consist of at least three cyclic tests shall be based upon one of the following requirements:

....

- 4.5. Part I, Section 10. Intermediate Moment Frames (IMF) including Commentary Section C10.
- 5 6. Part I, Section 11. Ordinary Moment Frames (OMF) including Commentary Section C11.
- 6-7. Part I, Section 12. Special Truss Moment Frames (STMF) including Commentary Section C12.
- **∠8.** Part I, Section 15.4b. Add the following to the end of the paragraph:
- **15.4b.** Where reinforcement at the beam-to-column connection at the Link end precludes yielding of the beam over the reinforced length, the Link is permitted to be the beam segment from the end of the reinforcement to the brace connection. Where such Links are used and the Link length does not exceed 1.6 M<sub>p</sub>/V<sub>p</sub>, cyclic testing of the reinforced connection is not required if the design strength of the reinforced section and the connection equals or exceeds the required strength calculated based upon the strain-hardened Link as described in Section 15.6a. Full depth stiffeners as required in Section 15.3a. shall be placed at the Link-to-reinforcement interface. *Cyclic testing of the Link connection to the weak axis of a wide flange column is required for any length link.*
- 8. Part I, Section S2. Add the following:

S2. SYMBOLS

T Peak deformation (interstory drift angle) in

radians used to control loading of the test specimen.

#### 9. Part I. Section S3. Revise to read as follows:

#### S3. DEFINITION

*Inelastic Rotation.* The permanent or plastic portion of the rotation angle between a beam and the column or between a Link and the column of the Test Specimen, measured in radians. The Inelastic Rotation shall be computed based upon an analysis of Test Specimen deformations. Sources of Inelastic Rotation include yielding of members and connectors, yielding of connection elements, and slip between members and connection elements. For beam-to-column moment connections in Moment Frames, inelastic rotation shall be computed based upon the assumption that inelastic action is concentrated at a single point located at the intersection of the centerline of the beam with the centerline of the column The the inelastic rotation is represented by the plastic chord rotation angle calculated as the plastic deflection of the beam or girder, at the center of its span divided by the distance between the center of the beam span and the centerline of the panel zone of the beam column connection . For link-to-column connections in Eccentrically Braced Frames, inelastic rotation shall be computed based upon the assumption that inelastic action is concentrated at a single point located at the intersection of the centerline of the link with the face of the column.

#### 10. Part I, Section S5.2. Revise to read as follows:

#### S5.2. Size of Members

- 1. The size of the beam or Link used in the Test Specimen shall be within the following limits:
  - a. At least one of the test beams or Links shall be 100% of the depth of the prototype beam or Link. For the remaining specimens, the depth of the test beam or Link shall be no less than 90 percent of the depth of the Prototype beam or Link.
  - b. At least one of the test beams or Links shall be 100% of the weight per foot of the prototype beam or Link. For the remaining specimens, the weight per foot of the test beam or Link shall be no less than 75 percent of the weight per foot of the Prototype beam or Link.

...

## 11. Part I, Section \$6.3.\$\text{S6.2} Revise to Add the following:

#### \$6.3 S6.2 Loading Sequence

Loads shall be applied to the Test Specimen, up to the completion of the test, to produce the following deformations:

1. 6 cycles of loading at ? = 0.00375

- 2. 6 cycles of loading at ? = 0.005
- 3. 6 cycles of loading at ? = 0.0075
- 4. 4 cycles of loading at ? = 0.01
- 5. 2 cycles of loading at ? = 0.015
- 6. 2 cycles of loading at ? = 0.02
- 7. 2 cycles of loading at ? = 0.03
- 8. After completion of loading cycles at 0.03, testing shall be continued to applying cyclic loads to produce ? equal to 0.04, 0.05, etc., with two complete loading cycles at each increment.

Continue loading at increments of ? = 0.01 rad., with two cycles of loading at each step.

Or alternatively, the loading sequence may be the following:

- 1. 3 cycles of loading at  $0.25d_{V} < d \pm 0.5d_{V}$
- 2. 3 cycles of loading at  $0.6 d_y < d \pm 0.8 d_y$
- 3. 3 cycles of loading at  $\mathbf{d} = \mathbf{d}_y$
- 4. 3 cycles of loading at  $\mathbf{d} = 2\mathbf{d}_{v}$
- 5. 3 cycles of loading at  $d = 3d_y$
- 6. 2 cycles of loading at  $\mathbf{d} = 4\mathbf{d}_{v}$
- After completion of the loading cycles at 4d<sub>y</sub>, testing shall be continued by applying cyclic loads to produce d equal to 5d<sub>y</sub>, 6d<sub>y</sub>, 7d<sub>y</sub>, etc. Two cycles of loading shall be applied at each incremental value of deformation.

Other loading sequences are permitted to be used to qualify the Test Specimen when they are demonstrated to be of equivalent severity.

#### 12. Part I - Section S10. Revise as follows:

#### S10. ACCEPTANCE CRITERIA

For each connection used in the actual frame, at least three cyclic tests are required for each condition in which the Essential Variables, as listed in Section S5, remain within the required limits. All tests shall satisfy the criteria stipulated in Sections 9.2, or 15.4, as applicable. In order to satisfy interstory drift angle and Inelastic Rotation requirements, each Test Specimen shall sustain the required interstory drift angle and inelastic rotation for at least two complete loading cycles without exhibiting rapid strength deterioration.

#### **SUB-ITEM 4-16**

Section 2213A.7.6 - Amend Section 2213A.7.6 as follows:

2213A.7.6 Trusses in SMRF. Not adopted by DSA
Trusses may be used as horizontal members in SMRF
if the sum of the truss seismic force flexural strength
exceeds the sum of the column seismic force flexural
strength immediately above and below the truss by a
factor of at least 1.25. For this determination the
strengths of the members shall be reduced by the
gravity load effects. In buildings of more than one story,
the column axial stress shall not exceed 0.4 Fy and the
ratio of the unbraced column height to the least radius of
gyration shall not exceed 60. Columns shall have
allowable stresses reduced 25 percent when one end
frames into a truss, and 50 percent when both ends
frame into trusses. The connection of the truss chords
to the column shall develop the lesser of the following:

- 1. The strength of the truss chord.
- 2. The chord force necessary to develop 125 percent of the flexural strength of the column

(END OF ITEM)

#### SUB-ITEM 4-17

**Chapter 16B, Division IV -** Repeal DSA-SS adoption of chapter 16B, Division IV.

Earthquake Regulations for Seismic-Isolated Structures [For DSA-SS]

Authority: Education Code Sections 17310 and 81142. Reference: Education Code Sections 17280 - 17317, 81130 - 81149.

ITEM 5
OSHPD 3/02
Part 2
Chapters 16A and 22A

#### **EXPRESS TERMS**

#### SUB-ITEM 5-1

Section 1627A - Amend Section 1627A as follows:

#### **SECTION 1627A - DEFINITIONS**

For the purposes of this division, certain terms are defined as follows:

. . . .

#### INCIDENTAL STRUCTURAL ALTERATIONS OR

**ADDITIONS** are alterations or additions, which would not reduce the story lateral shear force-resisting capacity by more than 5 percent or increase the story shear by more than 5 percent in any existing story.

IRREGULAR STRUCTURE is a structure designated as having one or more plan or vertical irregularities.

**LATERAL-FORCE-RESISTING SYSTEM** is that part of the structural system designed to resist the Design Seismic Forces.

. . . .

(END OF ITEM)

#### **SUB-ITEM 5-2**

Section 1629A.8 - Amend Section 1629A.8 as follows:

1629A.8 Selection of Lateral-force Procedure.

**1629A.8.1 General.** Any structure may be, and certain structures defined below shall be, designed using the dynamic lateral- force procedures of Section 1631A.

**1629A.8.2 Simplified static.** Not adopted by the State of California OSHPD.

**1629A.8.3 Static.** The static lateral force procedure of Section 1630A may be used for the following structures:

- 1. Not adopted by the State of California OSHPD.
- 2. Regular structures under 240 feet (73 152 mm) in height with lateral force resistance provided by systems listed in Table 16A-N, except where Section 1629A.8.4, Item 4, applies.
- 3. Irregular structures with flexible diaphragms not more than three stories or 30 feet (9144 mm) in height.

- 4. Structures having a flexible upper portion supported on a rigid lower portion where both portions of the structure considered separately can be classified as being regular, the average story stiffness of the lower portion is at least 10 times the average story stiffness of the upper portion and the period of the entire structure is not greater than 1.1 times the period of the upper portion considered as a separate structure fixed at the base.
- 5. Wood-frame structures having wood shear walls and wood diaphragms.
- 6. Irregular structures with reentrant corners, plan irregularity Type 2, Table 16A-M, which are otherwise eligible for static analysis.
- **1629A.8.4 Dynamic.** The dynamic lateral-force procedure of Section 1631A shall be used for all other structures, including the following:
- 1. Structures 240 feet (73 152 mm) or more in height.
- 2. Structures having a stiffness, weight or geometric plan or vertical irregularity of Type 1, 2 or 3, as defined in Table 16A-L or 16A-M, or structures having irregular features not described in Table 16A-L or 16A-M, except as permitted by <u>Section 1629A.8.3 and Section</u> 1630A.4.2.
- 3. Structures over five stories or 65 feet (19 812 mm) in height in Seismic Zones 3 and 4 not having the same structural system throughout their height except as permitted by Section 1630A.4.2.
- 4. Structures, regular or irregular, except those defined in Section 1629A.8.3, Items 3 and 5, located on Soil Profile Type  $S_F$ , that have a period greater than 0.5 second as calculated in accordance with Method B in Section 1630A.2.2. The analysis shall include the effects of the soils at the site and shall conform to Section 1631A.2, Item 4.

• • • •

(END OF ITEM)

#### SUB-ITEM 5-3

Section 1629A.9 - Amend Section 1629A.9 as follows:

1629A.9 System Limitations.

**1629A.9.1 Discontinuity.** Structures with a discontinuity in capacity, vertical irregularity Type 5 as defined in Table 16A-L, <u>are not permitted</u>. shall not be over two stories or 30 feet (9144 mm) in height where the weak story has a calculated strength of less than 65 percent

of the story above.

**EXCEPTION:** Where the weak story is capable of resisting a total lateral seismic force of  $S_{\sigma}$  times the design force prescribed in Section 1630A.

1629A9.2 Undefined structural systems....

1629A.9.3 Irregular features....

<u>1629A.9.4 Severe Soft Story.</u> Structures with a severe soft story vertical irregularity Type 1b, as defined in Table 16A-L, are not permitted.

<u>1629A.9.5 Severe torsional irregularity.</u> Structures with a severe torsional irregularity, plan irregularity Type 1b, as defined in Table 16A-M are not permitted if  $N_a$  or  $N_v$  is greater than 1.0.

....

(END OF ITEM)

#### SUB-ITEM 5-4

#### Section 1630A.2.2

Amend Section 1630A.2.2 as follows:

**1630A.2.2 Structure Period.** The value of *T* shall be determined from one of the following methods:

1. Method A: For all buildings, the value of T may be approximated from the following formula:

$$T_A = C_t (h_n)^{3/4}$$

(30A-8)

WHERE:

 $C_t$  = 0.035 (0.0853) for steel moment-resisting frames.

 $C_t$  = 0.030 (0.0731) for reinforced concrete momentresisting frames and eccentrically braced frames.

 $C_t$  = 0.020 (0.0488) for all other buildings.

Alternatively, the value of  $C_t$  for structures with concrete or masonry shear walls may be taken as  $0.1/\sqrt{A_c}$  . (For

**SI:**  $0.0743 / \sqrt{A_c}$  for  $A_c$  in m2).

The value of *Ac* shall be determined from the following formula:

$$A_{c} = \sum_{e} A_{e} \left[ 0.2 + \left( D_{e} / h_{n} \right)^{2} \right]$$
(30A-9)

The value of  $D_e/h_n$  used in Formula (30A-9) shall not exceed 0.9.

The value of T computed by Method A shall not be taken as larger than the value of T given by Method B. If Method B is not used to compute T, then the value of T

shall be taken as 
$$\frac{T_A}{IN_v}$$

. . . .

(END OF ITEM)

#### **SUB-ITEM 5-5**

Section 1630A.4 - Amend Section 1630A.4 as follows:

1630A.4 Combinations of Structural Systems.

**1630A.4.1 General.** Where combinations of structural systems are incorporated into the same structure, the requirements of this section shall be satisfied.

**1630A.4.2 Vertical combinations.** The value of R used in the design of any story shall be less than or equal to the value of R used in the given direction for the story above.

**EXCEPTION:** This requirement need not be applied to a story where the dead weight above that story is less than 10 percent of the total dead weight of the structure.

Structures may be designed using the procedures of this section under the following conditions:

- 1. The entire structure is designed using the lowest R of the lateral-force-resisting systems used, or
- 2. The following two <u>Two</u>-stage static analysis procedures may be used for structures conforming to Section 1629A.8.3, Item 4. <u>providing the structure complies with the following:</u>
- 2.1 The flexible upper portion shall be designed as a separate structure, supported laterally by the rigid lower portion, using the appropriate values of *R* and *D*.
- 2.2 The rigid lower portion shall be designed as a separate structure using the appropriate values of *R* and *D*. The reactions from the upper portion shall be those determined from the analysis of the upper portion

amplified by the ratio of the  $(R/\Delta)$  of the upper portion over  $(R/\Delta)$  of the lower portion. <u>This ratio shall not be</u> less than one.

- 2.3 Where design of elements of the upper portion are governed by special seismic load combinations, the special loads shall be considered in the design of the lower portion.
- 2.4 The lower portion shall have a stiffness at least 10 times the upper portion.
- 2.5 The period of the entire structure shall not be greater than 1.1 times the period of the upper portion considered as a separate structure fixed at the base.
- 2.6 The detailing requirements required by the lateral system of the upper portion shall be used for structural components common to the structural system of lower portion.
- 2.7 If separate models are used to design the upper and lower portions, the model boundary conditions of the upper portion shall be compatible with actual strength and stiffness of the supporting elements of the lower portion.

. . . .

(END OF ITEM)

#### **SUB-ITEM 5-6**

Section 1630A.7 - Amend Section 1630A.7 as follows:

**1630***A.***7 Horizontal Torsional Moments.** Provisions shall be made for the increased shears resulting from horizontal torsion where diaphragms are not flexible. The most severe load combination for each element shall be considered for design.

. . . .

Where torsional irregularity exists, as defined in Table 16<u>A</u>-M, the effects shall be accounted for by increasing the accidental torsion at each level by an amplification factor,  $A_x$ , determined from the following formula:

$$A_{x} = \left[\frac{\Delta_{\text{max}}}{1.2\Delta_{avg}}\right]^{2}$$

(30A-16)

#### WHERE:

 $\Delta_{avg}$  = the average of the <u>interstory</u> drift at the extreme points of the structure at Level x.

 $\Delta_{max}$  = the maximum <u>interstory</u> drift at Level x.

. . . .

(END OF ITEM)

#### **SUB-ITEM 5-7**

Section 1630A.10

Amend Section 1630A.10 as follows:

1630A.10 Story Drift Limitation

1630A.10.1 General...

**1630A.10.2 Calculated.** Calculated story drift using  $\underline{\Delta}_M$  shall not exceed 0.025 times the story height for structures having a fundamental period of less than 0.7 second. For structures having a fundamental period of 0.7 second or greater, the calculated story drift shall not exceed 0.020 times the story height.

**EXCEPTIONS:** 1. These drift limits may be exceeded when it is demonstrated that greater drift can be tolerated by both structural elements and nonstructural elements that could affect life safety <u>or continued operation</u>. The drift used in this assessment shall be based upon the Maximum Inelastic Response Displacement,  $\Delta_M$ .

2. There shall be no drift limit in single-story steel-framed structures classified as Groups B, F and S Occupancies or Group H, Division 4 or 5 Occupancies. In Groups B, F and S Occupancies, the primary use

(END OF ITEM)

#### SUB-ITEM 5-8

Section 1631A.3 - Amend Section 1631A.3 as follows:

**1631A.3 Mathematical Model.** A mathematical model of the physical structure shall represent the spatial distribution of the mass and stiffness of the structure to an extent that is adequate for the calculation of the significant features of its dynamic response. A three-dimensional model shall be used for the dynamic

analysis of structures with highly irregular plan configurations such as those having a plan irregularity defined in Table 16A-M and having a rigid or semi rigid diaphragm. The stiffness properties used in the analysis and general mathematical modeling shall be in accordance with Section 1630A.1.2. <u>The mathematical model of buildings with diaphragm discontinuities</u>, as defined in Table 16A-M, Item 3, shall explicitly include the effect of diaphragm stiffness.

#### (END OF ITEM)

#### SUB-ITEM 5-9

Section 1631A.5.4 - Amend Section 1631A.5.4 as follows:

**1631A.5.4** Reduction of Elastic Response Parameters for design. Elastic Response Parameters may be reduced for purposes of design in accordance with the following items, with the limitation that in no case shall the Elastic Response Parameters be reduced such that the corresponding design base shear is less than the Elastic Response Base Shear divided by the value of *R* or the values of  $V_{sc}$  defined in Item 4.

- 1. For all regular structures, \* \* \* Elastic Response Parameters may be reduced such that the corresponding design base shear is not less than 100 percent of the base shear determined in accordance with Section 1630A.2.
- 2. Not adopted by the State of California. [For OSHPD 1 & 4 and DSA/SS] For irregular structures with vertical irregularity Types 1a, 2,or 5, as defined in Table 16A-L, or irregular structures with plan irregularity Type 1b as defined in Table 16A-M, Elastic Response Parameters, may be reduced such that the corresponding design base shear is not less than 125 percent of the base shear determined in accordance with Section 1630A.2.

Exception: The Elastic Response Parameters for structures with Vertical Irregularity Types 1a or 2, as defined in Table 16A-L, or plan irregularity Type 1b as defined in Table 16A-M, may be reduced such that the corresponding design base shear is not less than 100 percent of the base shear determined in accordance with Section 1630A.2, if no interstory drift ratio under design lateral load is greater than 130 percent of the interstory drift ratio of the story immediately above. Torsional effects need not be considered in the calculation of story drifts for the purposes of this determination. The story drift ratio relationships for the top two stories of the structures are not required to be evaluated.

3. For all irregular structures, \* \* \* Elastic Response

Parameters may be reduced such that the corresponding design base shear is not less than 125 percent of the base shear determined in accordance with Section 1630A.2.

- 3. For all other structures, Elastic Response Parameters may be reduced such that the corresponding design base shear is not less than 100 percent of the base shear determined in accordance with Section 1630A.2.
- 4. The base shear V<sub>sc</sub> is determined from the following formula:

#### WHERE:

SR = the spectral ratio determined by the following formula:

$$SR = \frac{\sum_{m=1}^{n} (MPE_m PM_m)}{\sum_{m=1}^{n} (CBC_m PM_m)}$$
(31A-2)

V = the total design base shear calculated in accordance with Formula (30A-4).

#### WHERE:

CBC<sub>sr</sub>= spectral acceleration determined from the design response spectrum given in Figure 16A-3 for the appropriate soil type at the period of the mth mode.

MPE<sub>sr</sub>= spectral acceleration of the site-specific maximum probable earthquake spectrum (5 percent damping) at the period of the mth mode. The value of MPE<sub>sr</sub> need not exceed 1.5.

n = number of significant modes required for at least 90 percent of the total building mass to participate in the direction of interest.

PM<sub>ar</sub> = fraction of total building mass participating in the mth mode in the direction of interest.

The design base shear shall not be taken as less than  $V_{sc}$ , unless justification is provided to substantiate a level of safety equivalent to structural designs at other sites and meeting the requirements of Section 1631A.2, Item 6.

The corresponding reduced design seismic forces shall be used for design in accordance with Section 1612*A*.

Section 1632A.6 - Amend Section 1632A.2.6 as follows:

\* \* \* (END OF ITEM)

#### **SUB-ITEM 5-10**

1632A.6 HVAC Ductwork, Plumbing/Piping and Conduit Systems. All pipes, ducts and conduit shall be braced to resist the forces prescribed in Section 1630A.2. 1632A. Ductwork shall be constructed in accordance with provisions contained in Part 4, Title 24, California Mechanical Code. Pipes and their connections constructed of ductile materials (copper, ductile iron, steel or aluminum) with brazed or welded connections shall have brace spacing not exceeding that specified in Section <del>1630A.5</del> 1632A.5 or other standards approved by the enforcement agency. Pipes and their connections, constructed of nonductile materials (e.g., cast iron, no-hub pipe and plastic) or with screwed connections, shall have the brace spacing reduced to one-half of the spacing allowed for ductile material in accordance with Section 1630A.5 or other standards approved by the enforcement agency.

Seismic restraints may be omitted for the following conditions, where flexible connections are provided between components and the associated ductwork, piping, and conduit:

- 1. Fuel, medical gas, and vacuum piping less than 1 inch (25 mm) inside diameter.
- 2. All other piping less than 2.5 inches (64 mm) diameter, except medical gas including vacuum piping, or

All piping suspended by individual hangers 12 inches (305 mm) or less in length from the top of the pipe to the bottom of the structural support for the hanger. Rod hangers shall not be constructed in a manner that would subject the rod to bending moments. or

All electrical conduit less than 2.5 inches (64 mm) trade size.

3. All rectangular air-handling ducts less than 6 square feet (0.56 m2) in cross-sectional area, or

All round air-handling ducts less than 28 inches (711 mm) in diameter, or

All ducts suspended by hangers 12 inches (305 mm) or less in length from the top of the duct to the bottom of the structural support for the hanger, where the hangers are detailed to avoid bending of the hangers and their connections.

Where lateral restraints are omitted, the piping, ducts, or conduit shall be installed such that lateral motion of the piping. Or duct, or conduit will not cause damaging impact with other systems or structural members, or loss of vertical support.

(END OF ITEM)

#### **SUB-ITEM 5-11**

#### WITHDRAWN BY OSHPD

#### **SUB-ITEM 5-12**

Section 1633A.2.13.1 - Amend Section 1633A.2.13.1 as follows:

1633A.2.13.1 The design of guide rail support-bracket fastenings and the supporting structural framing shall be in accordance with Section 3030 (k), Part 7, Title 24, using the weight of the counterweight or maximum weight of the car plus not more than 40 percent of its rated load. The seismic forces shall be assumed to be distributed one third to the top guiding members and two thirds to the bottom guiding members of cars and counterweights, unless other substantiating data are provided. Minimum seismic forces shall be 0.5g acting in any horizontal direction, using allowable stress design.

Retainer plates are required for both car and counterweight, designed in accordance with Section 3032 (c), Part 7, Title 24, California Code of Regulations. Retainer plates are required at the top and bottom of the car and counterweight, except where safety devices acceptable to the enforcement agency are provided which meet all requirements of the retainer plates, including full engagement of the machined portion of the rail. The design of the car and counterweight guide rails for seismic forces shall be based on the following requirements:

- 1. The lateral forces <u>using allowable stress design</u> shall be based on horizontal acceleration of 0.5g for all buildings.
- 6. Cab stabilizers and counterweight frames shall be designed to withstand a lateral load equal to 0.5g using allowable stress design

(END OF ITEM)

#### **SUB-ITEM 5-13**

. . .

Table 16A-L - Amend Table 16A-L as follows:

### TABLE 16A-L—VERTICAL STRUCTURAL IRREGULARITIES

IRREGULARITY TYPE AND DEFINITION	REFERENCE SECTION
1 <u>a</u> . Stiffness irregularity-soft story	
A soft story is one in which the	
lateral stiffness is less than 70	1629 <i>A</i> .8.4, Item
percent of that in the story above or	2
less than 80 percent of the average	_
stiffness of the three stories above.	
1b. Severe Soft Story	
A severe soft story is one in which	
the lateral stiffness is less than 60	
percent of that in the story above or	1629A.9.4
less than 70 percent of the average	
stiffness of three stories above.	
2. Weight (mass) irregularity	
Mass irregularity shall be	
considered to exist where the	
effective mass of any story is more	1629 <i>A</i> .8.4, Item
than 150 percent of the effective	2
mass of an adjacent story. A roof	
that is lighter than the floor below	
need not be considered.	
3. Vertical geometric irregularity	
Vertical geometric irregularity shall	
be considered to exist where the	
horizontal dimension of the lateral-	
force-resisting system in any story	1629A.8.4, Item
is more than 130 percent of that in	2
an adjacent story. One-story	
penthouses need not be	
considered.	
4. In-plane discontinuity in vertical	
lateral-force-resisting element	
An in-plane offset of the lateral-load-	1630 <i>A</i> .8.2
resisting elements greater than the	
length of those the elements below.	
5. Discontinuity in capacity-weak	
story	
A weak story is one in which the	
ratio of the story strength to the story	
shear is less than 80 percent of that	
in the story above. The story	
strength is the strength of all	1629 <i>A</i> .9.1
seismic-resisting elements sharing	1020/1.3.1
the story shear for the direction	
under consideration. The load	
deformation characteristics of the	
elements shall be considered so	
that the strength is determined for	
compatible deformations.	i

(END OF ITEM)

#### **SUB-ITEM 5-14**

Table 16A-M - Amend Table 16A-M as follows:

#### TABLE 16A-M—PLAN STRUCTURAL IRREGULARITIES

IRREGULARITY TYPE AND	REFERENCE
DEFINITION	SECTION
a. Torsional irregularity-to be	
considered when diaphragms are	
not flexible	
Torsional irregularity shall be	
considered to exist when the	1633A.1
maximum story drift, computed	1633A.2.9,
including accidental torsion, at one	Item 6
end of the structure transverse to an	
axis is more than 1.2 times the	
average of the story drifts of the two	
ends of the structure.	
1b. Severe Torsional irregularity-	
to be considered when	
diaphragms are not flexible	
Severe Torsional irregularity shall	
be considered to exist when the	1629A.9.5
maximum story drift, computed	1631B.2.9,
including accidental torsion, at one	Item 6
end of the structure transverse to an	
axis is more than 1.4 times the	
average of the story drifts of the two	
ends of the structure.	
2. Reentrant corners	
Plan configurations of a structure	
and its lateral force-resisting	
system contain reentrant corners,	
where both projections of the	1633A.2.9,
structure beyond a reentrant corner	Items 6 and 7
are greater than 15 percent of the	
plan dimension of the structure in	
the given direction.	
3. Diaphragm discontinuity	
Diaphragms with abrupt	
discontinuities or variations in	
stiffness, including those having	
cutout or open areas greater than	1633A.2.9,
50 percent of the gross enclosed	Item 6
area of the diaphragm, or changes	1101110
in effective diaphragm stiffness of	
more than 50 percent from one	
story to the next.	
4. Out-of-plane offsets	1630A.8.2;
Discontinuities in a lateral force	1633A.2.9,
path, such as out-of-plane offsets of	Item 6;
the vertical elements.	
	2213A.9.1
5. Nonparallel systems	1622 4 4
The vertical lateral load-resisting	1633A.1
elements are not parallel to or	

symmetric about the major orthogonal axes of the lateral forceresisting system.

(END OF ITEM)

#### **SUB-ITEM 5-15**

Section 2210A - Amend Section 2210A as follows:

#### **SECTION 2210A - ADOPTION**

Except for the modifications as set forth in Section 2211A of this Division and the requirements of the building code, the seismic design, fabrication, and erection of structural steel shall be in accordance with the Seismic Provisions for Structural Steel Buildings, April 15, 1997 published by the American Institute of Steel Construction, 1 East Wacker Drive, Suite 3100, Chicago, IL 60601, including Supplement No. 42 dated February 15, 1999 November 10, 2000.

(END OF ITEM)

#### **SUB-ITEM 5-16**

Section 2211A - Amend Section 2211A as follows:

#### **SECTION 2211A - AMENDMENTS**

The Seismic Provisions for Structural Steel Buildings, hereinafter referred to as AISC Seismic 97, shall include only Part I (LRFD) and Appendix S. Where other codes, standards, or specifications are referred to in AISC Seismic 97 they are considered as supplemental standards and only considered guidelines subject to the approval of the enforcement agency.

#### 1. Part I, Glossary. Add the following:

Rapid Strength Deterioration: A mode of behavior characterized by a sudden loss of strength. In a cyclic test with constant or increasing deformation amplitude, a loss of strength of more than 50 percent of the strength attained in the previous excursion in the same loading direction.

2. Part I, Glossary. Ordinary, and Intermediate, and Special Truss Moment Frame (OMF, and IMF and STMF). Not adopted by OSHPD.

### 3. Part I, Section 7.3c amend this section to read as follows:

For members and connections that are part of the Seismic Force Resisting System, discontinuities located within a plastic hinging zone as defined in Section 7.4a, created by errors or by fabrication or erection operations, such as tack welds, erection aids, air-arc gouging, and thermal cutting, shall be repaired as required by the Engineer of Record <u>and approved by OSHPD.</u>

#### 34. Part I, Section 9.2 amend to read as follows:

#### 9.2. Beam-to-Column Joints and Connections

**9.2a.** The design of all beam-to-column joints and connections used in the Seismic Force Resisting System shall be based upon qualifying cyclic test results in accordance with Appendix S that demonstrate an <u>interstory drift angle of at least 0.04 radians</u> and an inelastic rotation of at least 0.03 radians.

. . . .

- 4<u>5</u>. Part I, Section 10. Intermediate Moment Frames (IMF) including Commentary Section C10. Delete.
- 5 6. Part I, Section 11. Ordinary Moment Frames (OMF) including Commentary Section C11. <u>Not adopted by OSHPD</u>.
- 6-7. Part I, Section 12. Special Truss Moment Frames (STMF) including Commentary Section C12. *Not adopted by OSHPD*.
- 6-8. Part I, Section 15.4b. Add the following to the end of the paragraph:
- **15.4b.** Where reinforcement at the beam-to-column connection at the Link end precludes yielding of the beam over the reinforced length, the Link is permitted to be the beam segment from the end of the reinforcement to the brace connection. Where such Links are used and the Link length does not exceed 1.6 M<sub>p</sub>/V<sub>p</sub>, cyclic testing of the reinforced connection is not required if the design strength of the reinforced section and the connection equals or exceeds the required strength calculated based upon the strain-hardened Link as described in Section 15.6a. Full depth stiffeners as required in Section 15.3a. shall be placed at the Link-to-reinforcement interface. *Cyclic testing of the Link connection to the weak axis of a wide flange column is required for any length link.*

### 7. Part I, Section S2. Add the following: S2. SYMBOLS

T Peak deformation (interstory drift angle) in radians used to control loading of the test specimen.

### <u>9</u>. Part I, Section S3. Revise to read as follows: S3. DEFINITIONS

Inelastic Rotation. The permanent or plastic portion of the rotation angle between a beam and the column or between a Link and the column of the Test Specimen, measured in radians. The Inelastic Rotation shall be computed based upon an analysis of Test Specimen deformations. Sources of Inelastic Rotation include yielding of members and connectors, yielding of connection elements, and slip between members and connection elements. For beam-to-column moment connections in Moment Frames, inelastic rotation shall be computed based upon the assumption that inelastic action is concentrated at a single point located at the intersection of the centerline of the beam with the centerline of the column The the inelatic rotation is represented by the plastic chord rotation angle calculated as the plastic deflection of the beam or girder, at the center of its span divided by the distance between the center of the beam span and the centerline of the panel zone of the beam column connection . For link-tocolumn connections in Eccentrically Braced Frames, inelastic rotation shall be computed based upon the assumption that inelastic action is concentrated at a single point located at the intersection of the centerline of the link with the face of the column.

### 9, 10. Part I, Section S5.2. Revise to read as follows: S5.2. Size of Members

- The size of the beam or Link used in the Test Specimen shall be within the following limits:
- a. At least one of the test beams or Links shall be 100% of the depth of the prototype beam or Link. For the remaining specimens, the depth of the test beam or Link shall be no less than 90 percent of the depth of the Prototype beam or Link.
- b. At least one of the test beams or Links shall be 100% of the weight per foot of the prototype beam or Link. For the remaining specimens, the weight per foot of the test beam or Link shall be no less than 75 percent of the weight per foot of the Prototype beam or Link.

### 40. <u>11</u>. Part I, Section <u>\$6.3</u>. <u>S6.2</u> Revise to <u>Add</u> the following:

S6.3 S6.2 Loading Sequence
Loads shall be applied to the Test Specimen, up to the
completion of the test, to produce the following
deformations:

- 1. 6 cycles of loading at ? = 0.00375
- 2. 6 cycles of loading at ? = 0.005
- 3. 6 cycles of loading at ? = 0.0075
- 4. 4 cycles of loading at ? = 0.01
- 5. 2 cycles of loading at ? = 0.015
- 6. 2 cycles of loading at ? = 0.02
- 7. 2 cycles of loading at ? = 0.03
- 8. After completion of loading cycles at 0.03, testing shall be continued to applying cyclic loads to produce? equal to 0.04, 0.05, etc., with two complete loading cycles at each increment.

Continue loading at increments of ? = 0.01 rad., with two cycles of loading at each step.

Or alternatively, the loading sequence may be the following:

- 1. 3 cycles of loading at  $0.25d_{\nu} < d \pm 0.5d_{\nu}$
- 2. 3 cycles of loading at  $0.6 d_v < d \pm 0.8 d_v$
- 3. 3 cycles of loading at  $\mathbf{d} = \mathbf{d}_{v}$
- 4. 3 cycles of loading at  $\mathbf{d} = 2\mathbf{d}_{v}$
- 5. 3 cycles of loading at  $\mathbf{d} = 3\mathbf{d}_{v}$
- 6. 2 cycles of loading at  $\mathbf{d} = 4\mathbf{d}_{v}$
- 7. After completion of the loading cycles at  $4\mathbf{d}_y$ , testing shall be continued by applying cyclic loads to produce  $\mathbf{d}$  equal to  $5\mathbf{d}_y$ ,  $6\mathbf{d}_y$ ,  $7\mathbf{d}_y$ , etc. Two cycles of loading shall be applied at each incremental value of deformation. Other loading sequences are permitted to be used to qualify the Test Specimen when they are demonstrated to be of equivalent severity.

### 44. 12. Part I - Section S10. Revise as follows: S10. ACCEPTANCE CRITERIA

For each connection used in the actual frame, at least three cyclic tests are required for each condition in which the Essential Variables, as listed in Section S5, remain within the required limits. All tests shall satisfy the criteria stipulated in Sections 9.2, or 15.4, as applicable. In order to satisfy interstory drift angle and Inelastic Rotation requirements, each Test Specimen shall sustain the required interstory drift angle and inelastic rotation for at least two complete loading cycles without exhibiting rapid strength deterioration.

(END OF ITEM)

#### **SUB-ITEM 5-17**

Section 2213A.7.6 - Amend Section 2213A.7.6 as follows:

2213A.7.6 Trusses in SMRF. Not adopted by OSHPD Trusses may be used as horizontal members in SMRF if the sum of the truss seismic force flexural strength exceeds the sum of the column seismic force flexural strength immediately above and below the truss by a factor of at least 1.25. For this determination the strengths of the members shall be reduced by the gravity load effects. In buildings of more than one story, the column axial stress shall not exceed 0.4 Fy and the ratio of the unbraced column height to the least radius of gyration shall not exceed 60. Columns shall have allowable stresses reduced 25 percent when one end frames into a truss, and 50 percent when both ends frame into trusses. The connection of the truss chords to the column shall develop the lesser of the following:

1. The strength of the truss chord.

### 2. The chord force necessary to develop 125 percent of the flexural strength of the column

#### Notation

Authority: Health and Safety Code Sections 1275, 129790, and 129850 and Government Code 11152.5.

Reference(s): Health and Safety Code Section 129850.

\* \* \*
(END OF ITEM)

# Part 3 California Electrical Code

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ITEM 6
DSA/SS 2/02
Part 3
Articles 89 and 90, Chapter 1 through 9, Various
Articles

#### **EXPRESS TERMS**

### CALIFORNIA ELECTRICAL CODE - ARTICLE 89 Administrative

Continue Article 89 of the 2001 triennial edition of the California Electrical Code for publication in the 2004 triennial edition of the California Electrical Code.

### CALIFORNIA ELECTRICAL CODE - ARTICLE 90 Introduction

Repeal Article 90 of the 1999 edition of the National Electrical Code and adopt Article 90 of the 2002 NEC for publication in the 2004 triennial edition of the California Electrical Code.

### CALIFORNIA ELECTRICAL CODE - CHAPTER 1 General

Amend Chapter 1 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
100	100	Х	
110	110	Х	

### CALIFORNIA ELECTRICAL CODE - CHAPTER 2 Wiring and Protection

Amend Chapter 2 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
200	200	Х	
210	210	Х	
215	215	Х	
220	220	Х	

225	225	Х	
230	230	Х	
240	240	Х	
250	250	Х	
280	280	Х	
-	285	Х	New NEC article - Transient Voltage Surge Suppressor s: TVSSs

### CALIFORNIA ELECTRICAL CODE - CHAPTER 3 Wiring Methods and Materials

Amend Chapter 3 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
300	300	X	
305	-		Relocated to Article 527 in 2002 NEC
310	310	X	
373	312	X	
370	314	X	
333	320	X	
363	322	X	
328	324	X	
325	326	Х	
326	328	Х	
334	330	Х	
330	332	Х	
336	334	Х	
340	336	Х	
338	338	Х	
339	340	Х	
345	342	Х	
346	344	X	

П		I	
350	348	Х	
351	350	Х	
347	352	Х	
343	354	Х	
351	356	Х	
348	358	Х	
349	360	Х	
331	362	Х	
374	366	Х	
364	368	Х	
365	370	Х	
358	372	Х	
356	374	Х	
362	376	Х	
362	378	Х	
353	380	Х	
342	382	Х	
-	384	Х	no correspondi ng article in 1999 NEC
352	386	Х	
352	388	Х	
354	390	Х	
318	392	Х	
324	394	Х	
321	396	Х	
320	398	X	

### CALIFORNIA ELECTRICAL CODE - CHAPTER 4 Equipment for General Use

Amend Chapter 4 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
400	400	Х	
402	402	X	

Т			1
380	404	Х	
410	406	Х	
384	408	Х	
410	410	Х	
411	411	X	
422	422	X	
424	424	X	
426	426	X	
427	427	X	
430	430	Х	
440	440	Х	
445	445	Х	
450	450	Х	
455	455	Х	
460	460	Х	
470	470	Х	
480	480	Х	
490	490	Х	

### CALIFORNIA ELECTRICAL CODE - CHAPTER 5 Special Occupancies

Amend Chapter 5 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
500	500	Х	
501	501	Х	
502	502	Х	
503	503	Х	
504	504	Х	
505	505	Х	
510	510	Х	
511	511	Х	
513	513	Х	
514	514	Х	
515	515	Х	

516	516	Х	
517	517	Х	
518	518	Х	
520	520	Х	
525	525	Х	
305	527	Х	
530	530	Х	
540	540	Х	
545	545	Х	
547	547	Х	
550	550	Х	
551	551	Х	
552	552	Х	
553	553	Х	
555	555	Х	

### CALIFORNIA ELECTRICAL CODE - CHAPTER 6 Special Equipment

Amend Chapter 6 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
600	600	Х	
604	604	Х	
605	605	Х	
610	610	Х	
620	620	Х	
625	625	Х	
630	630	Х	
640	640	Х	
645	645	Х	
-	647	Х	
650	650	Х	
660	660	Х	
665	665	Х	
668	668	Х	

669	669	Х	
670	670	Х	
675	675	Х	
680	680	Х	
685	685	Х	
690	690	Х	
-	692	Х	
695	695	Х	

### CALIFORNIA ELECTRICAL CODE - CHAPTER 7 Special Conditions

Amend Chapter 7 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
700	700	Х	
701	701	Х	
702	702	Х	
705	705	Х	
720	720	Х	
725	725	Х	
727	727	Х	
760	760	X	
770	770	X	
780	780	Х	

### CALIFORNIA ELECTRICAL CODE - CHAPTER 8 Communications Systems

Amend Chapter 8 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Article	2002 NEC Article	DSA-SS Adoption	Comments
800	800	Х	
810	810	Х	
820	820	Х	

830	830	Χ	

### CALIFORNIA ELECTRICAL CODE - CHAPTER 9 Tables

Amend Chapter 9 of the 2001 triennial edition of the California Electrical Code as follows for publication in the 2004 triennial edition of the California Electrical Code.

Repeal 1999 NEC Table	2002 NEC Table	DSA-SS Adoption	Comments
1	1	Х	
4	4	Х	
5	5	Х	
5A	5A	Х	
8	8	Х	
9	9	Х	
11(A)	11(A)	Х	
11(B)	11(B)	Х	
12(A)	12(A)	Х	
12(B)	12(B)	Х	

#### **CALIFORNIA ELECTRICAL CODE - Annex**

Repeal 1999 NEC Appendix	2002 NEC Annex	DSA-SS Adoption	Comments
А	А		
В	В		
С	С		
D	D		Repeal DSA adoption of Appendix D, 1999 edition NEC
Е	Е		Repeal DSA adoption of Appendix E, 1999 edition NEC

\* \* \*

ITEM 7 DSA/AC 2/02 Part 3

#### **EXPRESS TERMS**

#### Article 89 – Administration

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing the adoption of only those sections within Article 89 indicated below and on the attached matrix table. The numbers of each section and all references to these numbers within each section have been reformatted to coincide with the change in the numbering format of the 2002 NEC. Article 89 is an existing California amendment, which provides the purpose, scope, administrative authority, and application to local enforcement agencies. DSA-UD is proposing the amendments of various sections within Article 89 to maintain consistency between other Administrative Chapters within the California Code of Regulations, Title 24

## ARTICLE 989 - ADMINISTRATION Note: Article 989 has no corresponding Article in the NEC.

**089-1** <u>89.1</u> **Title**. The provisions contained in this Code shall be known as the "California Electrical Code," a portion of the "California Building Standards Code," as defined in the "California Building Standards Law" commencing with Section 18901 of the Health and Safety Code, and may be cited and referred to as the "California Electrical Code." The unqualified words "This Code" as used herein, refer only to the California Electrical Code, and do not include any other portions of the California Building Standards Code. These provisions may also be cited as "CEC." or "Part 3" within other parts of the California Building Standards Code (Title 24).

**089-2.** <u>89.2</u> **Purpose**. The purpose of this Code is to provide minimum standards to safeguard life or limb, health, property, and public welfare, and to protect against hazards that may arise from the use of electricity by regulating and controlling the design, construction, installation, quality of materials, location, and operation of electrical equipment, wiring, and systems.

[For DSA/AC] The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other developments to which this code applies and to ensure that they are accessible to and usable by persons with disabilities.

**089-3. 89.3 Scope**. The provisions of the Code and the building standards contained herein, including those standards adopted by reference without amendments, where specifically adopted by the listed agencies under their cited authority and enforced by the enforcing agency

specified in Section 0897 89.7, shall apply to the construction, alteration, moving, demolition, repair, and use of all electrical equipment, wiring, and systems in or on any building or structure or outdoors on any premise or property; except such electrical equipment, wiring and systems which are expressly exempted by Section 089-489.4.

Exception: Additions, Alterations, Repairs, and Moved Buildings. Notwithstanding other provisions of law, alterations, repairs, replacements, and moved buildings are governed by Health and Safety Code, Division 13, Part 1.5, Sections 17912, 17920.3, 17922(c), 17922.3, 17958.8, and 17958.9, known as the State Housing Law, and are implemented by the California Code of Regulations, Title 25, Chapter]. Health and Safety Code Sections 17958.8 and 17958.9 are repeated here for clarity and read as follows:

- (a) <u>Section</u> 17958.8. "Local ordinances or regulations governing alterations and repair of existing buildings shall permit the replacement, retention, and extension of original materials and the use of original methods of construction as long as the hotel, lodging house, motel, apartment house, or dwelling, or portions thereof, or building and structure accessory thereto, 2001 California Electric Code complies with the provisions published in the State Building Standards Code and the other rules and regulations of the department or alternative local standards adopted pursuant to Section 17920.7 and does not become or continue to be a substandard building."
- (b) Section 17958.9. "Local ordinances or regulations governing the moving of apartment houses and dwellings shall, after July 1, 1978, permit the retention of existing materials and methods of construction so long as the apartment house or dwelling complies with the building standards for foundation applicable to new construction, and does not become or continue to be a substandard building."

### **089-4. 89.4 Exempted from this Code**. This Code does not cover:

- (a) (A) Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobile homes, and recreational vehicles.
- (b) (B) Installations underground in mines, mine shafts, and tunnels.
- (c) (C) Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
- (d) (D) Installation of communication equipment under the exclusive control of communication utilities, located

outdoors or in building spaces used exclusively for such installations.

(e) (E) Installations under the exclusive control of electrical utilities for the purpose of communication or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.

Exception to (d) (D) and (e) (E): In places of employment, the following shall apply: installations of conductors, equipment, and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated, and maintained by an electric, communications, or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.

(f) (F) Installations on highways or bridges.

### <del>089-5.</del> <u>89.5</u> Non-Building Standards, Orders and Regulations.

- (a) (A) Requirements contained in the National Electrical Code (NEC), or in any other referenced code, document, or standard, which are not building standards as defined in Section 18912 of the Health and Safety Code, shall not be construed as a part of the provisions of this Code.
- (b) (B) For the applicability of regulations, safety, and other orders, and standards which relate to the administration, enforcement, maintenance, operation, and similar non-building standards, see other titles of the California Code of Regulations.

#### 089-6. 89.6 Order of Precedence and Use.

- (a) (A) In the event of any difference between the provisions of this Code and the National Electrical Code (NEC), or between this Code and the provisions of any other referenced code, document, or standard, the text of this Code shall govern. Where a specific provision varies from a general provision, the specific provisions shall apply.
- (b) (B) If a section of this Code makes a cross-reference to another section or table in the National Electrical Code (NEC), such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code for the particular enforcing agency.
- (e) (C) If a section in the National Electrical Code (NEC) makes a cross-reference to another section or table in the

NEC, such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code or the particular enforcing agency.

(d) (D) when adopted by a State agency, and approved by the Commission, the text of amended provisions contained in this Code shall take precedence over the corresponding provisions of the National Electrical Code (NEC).

**089-6.1 89.6.1 Local Variances.** For clarification purposes, the applicable Health & Safety Code Section 17958.5 is repeated here and reads as follows:

Section 17958.5. "Except as provided in Section 17922.6 to adopting the ordinances or regulations pursuant to Section 17958, a city or county may make such changes or modifications in the requirements contained in the provisions published in the California Building Standards Code and the other regulations adopted pursuant to Section 17922 as it determines, pursuant to the provisions of Section 17958.7, are reasonably necessary because of local climatic, geological, or topographical conditions.

"For purposes of this subdivision, a city and county may make reasonably necessary modifications to the requirements, adopted pursuant to Section 17922, contained in the provisions of the code and regulation on the basis of local conditions."

**089-6.2 89.6.2 Findings, Filing, and Rejections of Local Variances**. For clarification purposes, the applicable subsection of Health & Safety Code Section 17958.7 is repeated here and reads as follows:

#### Section 17958.7

- (a) "Except as provided in Section 17922.6, the governing body of a city or county, before making any modifications or changes pursuant to Section 17958.5, shall make an express finding that such modifications or changes are reasonably necessary because of local climatic, geological or topographical conditions. Such a finding shall be available as a public record. A copy of those findings, together with the modification or change expressly marked and identified to which each finding refers shall be filed with the California Building Standards Commission. No modification or change shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission."
- **(b)** "The California Building Standards Commission may reject a modification or change filed by the governing body of a city or county if no finding was submitted."

#### 089-7. 89.7 Application.

5. DSA/AC-Division of the State Architect, Access Compliance.

General. To assure that barrier free design is incorporated in all buildings, facilities, site work, and other improvements to which this code applies; to assure that these improvements are accessible to and usable by physically disabled persons. Additions, alterations, and structural repairs in all buildings and facilities shall comply with these provisions for new buildings, except as otherwise provided and specified herein. The provisions of these regulations shall apply to any portable buildings leased or owned by a school district, and shall also apply to temporary and emergency buildings and facilities. In addition, to incorporate standards at least as restrictive as those required by the federal government for barrier-free design under (1) Title III (Public Accommodations and Commercial Facilities), Subpart D (New Construction and Alteration) and Appendix A (Americans with Disabilities Act Accessibility Guidelines) (see 28 S C.F.R. Part 36), and (2) Title II (Public Entities), Section 35.151 (New Construction and Alterations) (see 28 C.F.R., Part 35) both from the Americans with Disabilities Act of 1990, and (3) under the Fair Housing Amendments of 1988. Some of these regulations may be more stringent than state law in order to meet the federal requirement.

**A. Application-** Publicly-Funded Buildings, Structures, Sidewalks, Curbs, and Related Facilities shall be accessible to and usable by persons with where access for people with physical disabilities as follows: is required to areas designated in Part 2 of Title 24.

**Note:** See Government Code, commencing with Section 4450.

- (1) All buildings, structures, sidewalks, curbs, and related facilities constructed <u>in the state</u> by the use of State, county, or municipal funds, or the funds of any political subdivision of the State.
- (2) All buildings, structures, and facilities, occupied 50 percent or more, which that are leased, rented, contracted, sublet, or hired for periods in excess of two years by any municipal, county, or State division of government or by a special district. The determination as to whether the building, structure, or facility is occupied 50 percent or more shall be based upon the usable floor areas as defined in Part 2 of this code.
- (3) All publicly-funded living accommodations.
- (4) (3) All publicly-funded buildings used for congregate residences or for one- or two-family dwelling unit purposes shall conform to the appropriate provisions applicable to living accommodations.
- (5) (4) All existing publicly funded buildings and facilities when alterations, structural repairs or additions are made to such buildings or facilities. For detailed requirements on existing buildings, see California Code of Regulations, Title 24, Part 2, Chapter 11B, Division IV. This

requirement shall apply only to the area of specific alteration, structural repair, or addition and shall include those areas listed below:

- (a) A primary entrance to the building or facility and the primary path of travel to the specific area of alteration, structural repair, or addition.
- (b) Sanitary facilities, drinking fountains, and publictelephones serving the area.

Exception No. 1 When the total construction cost of alterations, structural repairs or additions does not exceed a valuation threshold of \$50,000, based on January 1981, "ENR US-20 Cities" average construction cost index of 3372.02 ("Engineering News Record," McGraw-Hill Publishing Co.), and the enforcing agency finds that compliance with this Code creates an unreasonable hardship, compliance shall be limited to the actual work of the project.

The enforcing agency shall, annually, update the valuation threshold to a current amount based on the increase in the index since the last figure used.

Exception No. 2: Alterations, structural repairs or additions consisting of one of the following shall be limited to the actual work of the project:

a. Altering one building entrance to meet handicapped/physically-disabled requirements.
b. Altering one existing toilet facility to meet handicapped/physically-disabled requirements.
c. Altering existing elevators to meet handicapped/physically disabled requirements.
d. Altering existing steps to meet handicapped/physically-disabled requirements.
e. Altering existing handrails to meet handicapped/physically-disabled requirements.

Exception No. 3: Projects which consist only of heating, ventilation, air conditioning, reroofing, electrical work not involving placement of switches and receptacles, cosmetic work that does not affect access, such as painting, carpeting, etc., are not considered alteration projects for purposes of accessibility for the handicapped/people with physical disabilities and shall not be subject to DSA/AC requirements.

- (5) With respect to buildings, structures, sidewalks, curbs and related facilities not requiring a building permit, building standards published in the California Building Standards Code relating to access for persons with disabilities and other regulations adopted pursuant to Government Code Section 4450, and in effect at the time construction is commenced, shall be applicable.
- **B.** Application. All Privately Funded Public Accommodations as defined, and commercial facilities, as defined, and Facilities where access for people with shall be accessible to persons with physical disabilities as follows: is required to areas designated in Part 2 or Title

24

**Note:** See Health and Safety Code, commencing with Section 19952.

**Exception**: See California Code of Regulations, Title 24, Part 2, Section 1103B.1, for types of privately funded multistory buildings, which do not require installation of an elevator or to provide access above and below the first floor.

- (1) Any building, structure, facility, complex, or improved area or portion thereof which is used by the general public, and shall include:
- a. Auditoriums, convention centers, and stadiums.
- b. Hospitals, including but not limited to, hospitals, nursing homes, and convalescent homes.
- c. Theaters, restaurants, and shopping centers.
- d. Hotels and motels.
- e Passenger vehicle service stations.
- f. Offices of physicians and surgeons.
- g. Office buildings.
- h. Public curbs and sidewalks.
- (2) Any sanitary facilities which, are made available for the public, clients, or employees in such accommodations or facilities.
- (3) Any curb or sidewalk intended for public use that is constructed in this State with private funds.
- (4) All existing privately funded public accommodations when alterations, structural repairs, or additions are made to such public accommodations as set forth in the California Code of Regulations, Title 24, Part 2, Chapter 11B.
- Exception No. 1: In privately funded mufti-storied passenger vehicle service stations, shopping centers, offices of physicians and surgeons, and office buildings, subject to this code, floors or levels above and below the first floor or ground level are exempt from these requirements if a ramp or elevator is not available to provide public access to such floors or levels.
- **Exception No. 2:** In privately funded mufti-storied buildings, floors or levels above the first floor or ground level are exempt from these requirements if a reasonable portion of all facilities and accommodations normally sought and used by the public in such a building are accessible to and usable by physically handicapped persons/people with physical disabilities.
  - C. Application. Public housing and private housing available for public use.

Note: See Government Code Sections 4450 and 12955.1(d).

#### C. D. Enforcing Agency:

- (1) By the The Director of General Services where State funds are utilized for any project or where funds of counties, municipalities, or other political subdivisions are utilized for the construction of elementary; secondary, or community college projects.
- (2) By the <u>The</u> governing bodies thereof where funds of counties, municipalities, or other political subdivisions are utilized except as otherwise provided above.
- (3) By the <u>The</u> building department of every city, county, or city and county, within the territorial area of its city, county, or city and county, where private funds are utilized. "Building department" means the department, bureau, or officer charged with the enforcement of laws or ordinances regulating the erection or construction, or both the erection and construction, of buildings.
- D. E. Special Conditions for the Physically Handicapped Persons With Disabilities Requiring Appeals Action Ratification: Whenever reference is made in these regulations to this section, the findings and determinations required to be rendered by the local enforcing agency shall be subject to ratification through an appeals process.
- **E.** <u>F.</u> Authority Cited- Government Code Section 4450 and Health and Safety Code 18949.1.
- **F.** <u>G.</u> Reference- Government Code Sections 4450 through 4458 4460, 12955.1, and Health and Safety Code Sections 18949.1, 19952 through 19959.

#### <u>Article 90 – Introduction</u>

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Article 90 of the 2002 NEC.

#### CHAPTER 1: General, Articles 100-110

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Articles 100-110 of the 2002 NEC.

CHAPTER 2: Wiring and Protection, Articles 200-285
The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing not to adopt Articles 200-285 of the 2002 NEC.

Note: In the 2002 Edition of the NEC, Section 210-7 was revised and relocated to Section 406.3. California amendment Section 210-7(g) has been renumbered and relocated with modification to Section 406.3(G).

### Article 210 - Branch Circuits General Provisions

#### 210-7. Receptacles and Cord Connectors.

(g) [For DSA/AC] Installation Height. Where access for people with physical disabilities is required by Article 089-789.7, the center of receptacle outlets on branch circuits of 30 amperes or less shall be installed not more than 48 inches nor less than 15 inches above the floor or working

platform.

Exception No 1: Receptacle outlets installed, as a permanently installed baseboard heaters are exempt.

Exception No. 2: Required receptacle outlets shall be permitted in floors when adjacent to sliding panels or walls.

Exception No. 3: Baseboard electrical outlets used in relocatable partitions, window walls, or other electrical convenience floor outlets are not subject to the minimum height requirements.

Exception No. 4: This section shall not apply to existing buildings when the enforcing agency determines that compliance with these standards would create an unreasonable hardship.

#### CHAPTER 3: Wiring Methods and Materials-Articles 300-398

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Articles 300-398 of the 2002 NEC.

Note: In the 2002 Edition of the NEC, Section 380-8 was revised and relocated to Section 404. California amendment Section 380-8(c) has been renumbered and relocated with modification to Section 404-8(C

### Article 380 - Switches 380-8 Accessibility and Grouping

(c) [DSA/AC] – Installation Where access for people with physical disabilities is required by Article 89.7, the center of the grip of the operating handle of controls or switches intended to be used by the occupant of the room or area to control lighting and receptacle outlets, appliances or cooling, heating and ventilating equipment, shall be not more than 48 inches (1219 mm) above the floor or working platform.

#### CHAPTER 4: Equipment-Articles 400-402, 407-490

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Articles 400-402 and 407-490. DSA-UD adopts a California amendment to NEC Article 404 for Installation Height of switches, Section 404 (C). DSA-UD adopts a California amendment to NEC Article 406 for Installation Heights of receptacles, cord connectors and attachment plugs, Section 406.3(G).

# Article 404 – Switches I. Installation 404.8 Accessibility and Grouping (C) [For DSA/AC] Installation

Where access for people persons with physical disabilities is required by Article 089-7 089.7, the center of the grip of the operating handle of controls or switches intended to be used by the occupant of the room or area

to control lighting and receptacle outlets, appliances or cooling, heating and ventilating equipment, shall be 48 inches (1219 mm) above the floor or working platform.

### <u>Article 406 – Receptacles, Cord Connectors, and Attachment Plugs (Caps)</u>

406.3 General Installation Requirements. 406.3 (G) Installation Heights.

[For DSA/AC] Installation Heights. Where access for people persons with physical disabilities is required by Article 089-7 089.7 the center of electrical receptacle outlets on branch circuits of 30 amperes or less shall be installed not more than 48 inches nor less than 15 inches above the floor or working platform.

#### **CHAPTER 5: Special Occupancies, Articles 500-555**

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Articles 500-555 of the 2002 NEC.

#### CHAPTER 6: Special Equipment, Articles 600-695

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Articles 600-695 of the 2002 NEC.

### CHAPTER 7: Special Conditions, Articles 700-727 and 780

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Articles 700-727 and 780. DSA-UD is proposing to adopt the entire NEC Articles 760 and 770 by reference with a California amendment to Section 760.16. The entire Articles 760 and 770 are adopted by reference in the California Code of Regulations, Title 24, Part 2, Chapter 35, Section 3505.1.

#### Article 760 – Fire Alarm Systems

Note: [For DSA/AC] Article 760 is adopted by reference in the California Code of Regulations, Title 24, Part 2, Chapter 35, Section 3505.

#### General

**760.16 [For DSA/AC]** <u>Fire Alarm</u> <u>Installation Heights of Manual Pull</u> Stations. The center of fire alarm manual pull stations shall be located 48 inches above the level of the floor, working platform, ground surface, or sidewalk.

**Exception:** Enforcement officials shall not retroactively require fire alarm initiating devices be relocated to a 48-inch height.

#### **Article 770 – Optical Fiber Cables and Raceways**

Note: [For DSA/AC] Article 770 is adopted by reference in the California Code of Regulations, Title 24, Part 2, Chapter 35, Section 3505.

#### CHAPTER 8: Communication Systems, Articles 810-830

The Division of the State Architect - Office of Universal

Design (DSA-UD) is proposing <u>not</u> to adopt Articles 810-830. DSA-UD is proposing to adopt the entire NEC Article 800 by reference with a California amendment to Article 800. The entire Article 800 is adopted by reference in the California Code of Regulations, Title 24, Part 2, Chapter 35, Section 3505.1.

#### **Article 800 - Communications Circuits**

Note: [For DSA/AC] Article 800 is adopted by reference in California Code of Regulations, Title 24, Part 2, Chapter 35, Section 3505.

#### **CHAPTER 9: Tables**

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Chapter 9-Tables of the 2002 NEC.

#### **ANNEXES:**

The Division of the State Architect – Office of Universal Design (DSA-UD) is proposing <u>not</u> to adopt Annexes A, B, C, D, E, and F of the 2002 NEC.

#### ARTICLE 089--ADMINISTRATION

1999 NEC		2002 NEC			
Code Section		Code Section		Comments	
			DSAAC		
Adopt entire State Article without amendments	Х	Adopt entire State Article without amendments			
Adopt entire State article as amended (amendments listed below		Adopt entire State article as amended (amendments listed below			
Adopt only those sections which are listed below		Adopt only those sections which are listed below	<u>X</u>		
089-1		89.1	<u>X</u>	Renumbered to 89.1	
089-2		89.2	X	Renumbered to 89.2 & adopt a 2 <sup>nd</sup> paragraph	
089-3		89.3	<u>X</u>	Renumber to 89.3	
089-4		89.4	<u>X</u>	Renumber to 89.4	
089-5		89.5	<u>X</u>	Renumber to 89.5	
089-6		89.6	<u>X</u>	Renumber to 89.6	
089-6.1		89.6.1	<u>X</u>	Renumber to 89.6.1	
089-6.2		89.6.2	<u>X</u>	Renumber to 89.6.2	
089-7 – Item 5		89.7-Item 5	X	Renumber to 89.7 and amend to be consistent with other Administrative chapters within CCR, Title 24.	

#### ARTICLE 210-BRANCH CIRCITS

1999 NEC Code Section		2002 NEC Code Section		Comments
			DSAAC	
Adopt entire State article as amended (amendments listed below		Adopt entire State article as amended (amendments listed below		
Adopt only those sections which are listed below	Х	Adopt only those sections which are listed below		
210-7(g)	Х	<del>210-7(g)</del>		Relocated to 406.3(G), see Ch 4

#### ARTICLE 346—RIGID METAL CONDUIT

1999 NEC Code Section		2002 NEC Code Section		Comments
			DSAAC	
Adopt entire State article as amended (amendments listed below	Х	Adopt entire State article as amended (amendments listed below		Article has been deleted
Adopt only those sections which are listed below		Adopt only those sections which are listed below		

#### **ARTICLE 380--SWITCHES**

1999 NEC Code Section		2002 NEC Code Section		Comments
			DSAAC	
Adopt only those sections which are listed below	Х	Adopt only those sections which are listed below		
380-8(c)	Х	380-8(c)		Relocated to 404.8(C), see Ch 4

#### ARTICLE 404--SWITCHES

2002 NEC Code Section		
	DSAAC	
Adopt entire State article as amended (amendments listed below		
Adopt only those sections which are listed below	X	
404.8(C)	<u>X</u>	Relocated from 380-8(c)
	Adopt entire State article as amended (amendments listed below  Adopt only those sections which are listed below	Adopt entire State article as amended (amendments listed below  Adopt only those sections which are listed below

### ARTICLE 406—RECEPTACLES, CORD CONNECTORS, AND ATTACHMENT PLUGS (Caps)

2002 NEC Code Section		Comments
	DSAAC	
Adopt entire State article as amended (amendments listed below		
Adopt only those sections which are listed below	X	
406.3(G)	<u>X</u>	Relocated from 210-7(g)
	Adopt entire State article as amended (amendments listed below  Adopt only those sections which are listed below	Code Section  DSAAC  Adopt entire State article as amended (amendments listed below  Adopt only those sections which are listed below

#### ARTICLE 540—MOTION PICTURE PROJECTION ROOMS

1999 NEC Code Section		2002 NEC Code Section	Comments
Adopt entire State Article without amendments	Х	Adopt entire State Article without amendments	Article has been deleted
Adopt entire State article as amended (amendments listed below)		Adopt entire State article as amended (amendments listed below	
Adopt only those sections which are listed below		Adopt only those sections which are listed below	

#### ARTICLE 760—FIRE ALARM SYSTEMS

1999 NEC Code Section	2002 NEC Code Section					
Adopt entire State Article without amendments	Adopt entire State Article without amendments	X	This article is adopted by reference in CCR, T-24, Pt 2, Chapter 35, Section 3505.1, under amending section 1.5.5.4 of the NFPA 72 Adopt as amended by SFM			
Adopt entire State article as amended (amendments listed below)	Adopt entire State article as amended (amendments listed below					
Adopt only those sections which are listed below	Adopt only those sections which are listed below					

#### ARTICLE 770—OPTICAL FIBER CABLES AND RACEWAYS

1999 NEC Code Section	2002 NEC Code Section					
Adopt entire State Article without amendments	Adopt entire State Article without amendments	<u>X</u>	This article is adopted by reference in CCR, T-24, Pt 2, Chapter 35, Section 3505.1, under amending section 1.5.5.4 of the NFPA 72 Adopt as amended by SFM			
Adopt entire State article as amended (amendments listed below)	Adopt entire State article as amended (amendments listed below					
Adopt only those sections which are listed below	Adopt only those sections which are listed below					

#### ARTICLE 800—COMMUNICATIONS CIRCUITS

1999 NEC Code Section	2002 NEC Code Section		Comments
Adopt entire State Article without amendments	Adopt entire State Article without amendments	<u>X</u>	This article is adopted by reference in CCR, T-24, Pt 2, Chapter 35, Section 3505.1, under amending section 1.5.5.4 of the NFPA 72 Adopt as amended by SFM
Adopt entire State article as amended (amendments listed below)	Adopt entire State article as amended (amendments listed below		
Adopt only those sections which are listed below	Adopt only those sections which are listed below		

ITEM 8

**OSHPD 5/02** 

Part 3, Article 80, 89, and 90, Chapter 1 through 9

#### **EXPRESS TERMS**

ARTICLE 089 Administration

OSHPD will continue to adopt entire State Article 089

ARTICLE 110

**Requirements for Electrical Installations** 

110.13 Mounting and Cooling of Equipment.

- (A) Mounting. Electrical equipment shall be firmly secured to the surface on which it is mounted. Wooden plugs driven into holes in masonry, concrete, plaster, or similar materials shall not be used.
- (B) Cooling. Electrical equipment that depends on the natural circulation of air and convection principles for cooling of exposed surfaces shall be installed so that room airflow over such surfaces is not prevented by walls or by adjacent installed equipment. For equipment designed for floor mounting, clearance between top surfaces and adjacent surfaces shall be provided to dissipate rising warn air. Electrical equipment provided with ventilating openings shall be installed so that walls or other obstructions do not prevent the free circulation of air through the equipment.
- (C) [For OSHPD 1, 2, & 4] Hospitals. Electrical equipment and its supporting structure installed in hospital buildings shall be anchored and braced to withstand the lateral forces, and shall accommodate calculated displacements as required by Part 2, Title 24, C.C.R.
- 110.26 Spaces About Electrical Equipment. Sufficient access and working space shall be provided and maintained about all electric equipment to permit ready and safe operation and maintenance of such equipment. Enclosures housing electrical apparatus that are controlled by lock and key shall be considered accessible to qualified persons.
  - (F) Dedicated Equipment Space. All switchboards, panel boards, distribution boards, and motor control centers shall be located in dedicated spaces and protected from damage.

**Exception:** Exemption: Control equipment that by its

very nature or because of other rules of the Code must be adjacent to or within sight of its operating machinery shall be permitted in those locations.

Exemption No. 2: [For OSHPD 1, 2, & 4] Wall spaces in patient care rooms shall not be used for the installation of switchboards and panelboards, Unless dedicated for that room... [NOTE: This amendment is being moved to Article 517.12]

- (1) Indoor. Indoor installations shall comply with 110.26(F)(1)(a) through (d).
- (a) Dedicated Electrical Space. The space equal to the width and depth of the equipment and extending from the floor to a height of 1.8 m (6 ft) above the equipment or to the structural ceiling, whichever is lower, shall be dedicated to the electrical installation. No piping, ducts, leak protection apparatus, or other equipment foreign to the electrical installation shall be located in this zone.

Exception: Suspended ceilings with removable panels shall be permitted within the 1.8-m (6-ft) zone.

- **(b) Foreign Systems.** The area above the dedicated space required by 110.26(F)(1)(a) shall be permitted to contain foreign systems, provided protection is installed to avoid damage to the electrical equipment from condensation, leaks, or breaks in such foreign systems.
- **(c) Sprinkler Protection.** Sprinkler protection shall be permitted for the dedicated space where the piping complies with this section.
- **(d) Suspended Ceilings.** A dropped, suspended, or similar ceiling that does not add strength to the building structure shall not be considered a structural ceiling.
- (2) Outdoor. Outdoor electrical equipment shall be installed in suitable enclosures and shall be protected from accidental contact by unauthorized personnel, or by vehicular traffic, or by accidental spillage or leakage from piping systems. The working clearance space shall include the zone described in 110.26(A). No architectural appurtenance or other equipment shall be located in this zone.

**ARTICLE 352** 

Rigid Nonmetallic Conduit: Type RNC

NOTE: Relocating the following OSHPD Amendment from Section 347-3(g) to Section 352.12(G) 347-3. 352.12 Uses Not Permitted. RNC shall not be used in the following locations:

. . . .

**(F)** Theaters and Similar Locations. In theaters and similar locations, except as provided in Articles 518 and

520.

(G) [For OSHPD 1, 2, 3 & 4] For branch circuits inpatient care areas of hospitals, nursing homes, clinics, and correctional treatment centers, and other health care facilities.

## ARTICLE 362 Electrical Nonmetallic Tubing: Type ENT

NOTE: Relocating the following OSHPD Amendment from Section 331-4(10), to Section 362.12(11) 331-4. 362.12 Uses Not Permitted. ENT shall not be used in the following:

. . . .

- (10) Where subject to physical damage.
- (11) [For OSHPD 1, 2, 3, & 4] For branch circuits inpatient care areas of hospitals, nursing homes, clinics, and correctional treatment centers.

#### ARTICLE 380 Multioutlet Assembly

NOTE: Relocating the following OSHPD Amendment from Section 353-2(b)7 to Section 380(B)(7) 353-2. 380.2(B) Not Permitted. A multioutlet assembly shall not be installed as follows:

....

- (6) In any hazardous (classified) locations except Class I, Division 2 locations as permitted in 501.4(B)(3)
- (7) [For OSHPD 1, 2, 3, & 4] Nonmetallic multioutlet assembly shall not be used in patient care areas of hospitals, nursing homes, clinics, and correctional treatment centers.

### ARTICLE 382 Nonmetallic Extensions

NOTE: Relocating the following OSHPD Amendment from Section 342-4(f) to Section 382.12(5) 342-4. 382.12 Uses Not Permitted. Nonmetallic extensions shall not be used as follows:

. . . .

- (4) Where run through a floor or partition, or outside the room in which it originates
- (f) (5) [For OSHPD 1, 2, 3, & 4] For branch circuits in-

patient care areas of hospitals, nursing homes, clinics, and correctional treatment centers.

### ARTICLE 388 Surface Nonmetallic Raceways

NOTE: Relocating the following OSHPD Amendment from Section 352-22(b)(8) to Section 388.12(8) 352-22. 388.12 Uses Not Permitted. Surface nonmetallic raceways shall not be used in the following:

- (7) For conductors whose insulation temperature limitations would exceed those for which the nonmetallic raceway is listed
- (8) [For OSHPD 1, 2, 3, & 4] Surface nonmetallic raceways shall not be used for branch circuits in patient care areas of hospitals, nursing homes, clinics, and correctional treatment centers, except for low voltage application.

#### ARTICLE 392 Cable Trays

NOTE: Relocating the following OSHPD Amendment from Section 318-4 to Section 392.4
318-4. 392.4 Uses Not Permitted. Cable tray systems shall not be used in hoistways or where subject to severe physical damage. Cable tray systems shall not be used in environmental airspaces, except as permitted in Section 300.22, to support wiring methods recognized for use in such spaces. [For OSHPD 1, 2, 3, & 4] Nonmetallic cable trays shall not be used for branch circuits in patient care areas of hospitals, nursing homes, and clinics, and correctional treatment centers.

#### ARTICLE 404 Switches

NOTE: Relocating the following OSHPD Amendment from Section 680-62(g)(1) to Section 404.8(A.1) Switches 680-62(g)(1) 404.8 Accessibility and Grouping.

- (A) Location. All switches and circuit breakers used as switches shall be located so that they may be operated from a readily accessible place. They shall be installed so that the center of the grip of the operating handle of the switch or circuit breaker, when in its highest position, is not more than 2.0 m (6 ft 7 in.) above the floor or working platform.
- **Exception No. 1**: On bus way installations, fused switches and circuit breakers shall be permitted to be located at the same level as the bus way. Suitable means shall be provided to operate the handle of the

device from the floor.

**Exception No. 2**: Switches and circuit breakers installed adjacent to motors, appliances, or other equipment that they supply shall be permitted to be located higher than specified in the foregoing and to be accessible by portable means.

**Exception No. 3**: Hook stick operable isolating switches shall be permitted at greater heights.

(A.1) [For OSHPD 1, 2, & 4] Switches shall not be installed within shower rooms or stalls or be accessible from within these areas. Switches shall not be installed within 5 feet (1.52 m) of the perimeter of bathtubs.

## ARTICLE 406 Receptacles, Cord Connectors, and Attachment Plugs (Caps)

NOTE: Relocating the following OSHPD Amendment from Section 680-62(g)(1) to Section 406.8(C.1) Receptacles 680-62(g)(1) 406.8 Receptacles in Damp or Wet Locations.

- **(C)** Bathtub and Shower Space. A receptacle shall not be installed within a bathtub or shower space.
- (C.1) [For OSHPD 1, 2, & 4] Receptacles shall not be installed within shower rooms or stalls or be accessible from within these areas. Receptacles shall not be installed within 5 feet (1.52 m) of the perimeter of bathtubs.

### ARTICLE 517 Health Care Facilities

#### 517-3. 517.2 Definitions.

Patient Care Area. Any portion of a health care facility wherein patients are intended to be examined or treated. Areas of a health care facility in which patient care is administered are classified as general care areas or critical care areas, either of which may be classified as a wet location. The governing body of the facility designates these areas in accordance with the type of patient care anticipated and with the following definitions of the area classification.

#### (b) Critical Care Areas....

**General Care Areas.** Patient bedrooms, examining rooms, treatment rooms, clinics, and similar area in which it is intended that the patient will come in contact with ordinary appliances such as a nurse call system, electrical beds, examining lamps, telephone, and

entertainment devices. In such areas, it may also be intended that patients be connected to electro medical devices (such as heating pads, electrocardiographs, drainage pumps, monitors, otoscopes, ophthalmoscopes, intravenous lines, etc.)

Critical Care Areas. Those special care units, intensive care units, coronary care units, angiography laboratories, cardiac catheterization laboratories, delivery rooms, operating rooms, [For OSHPD 1, 2, 3, & 4] post-operative recovery rooms, and similar areas in which patients are intended to be subjected to invasive procedures and connected to line-operated, electro medical devices.

Wet Locations. Those patient care areas that are normally subject to wet conditions while patients are present. These include standing fluids on the floor or drenching of the work area, either of which condition is intimate to the patient or staff. Routine housekeeping procedures and incidental spillage of liquids do not define a wet location.

**517-4. 517.4** [For OSHPD 1, 2, & 4] **Services/Systems and Utilities** Refer to Section 420A.4.0 Chapter 4A, Part 2, California Building Code.

#### II. Wiring and Protection

#### 517.10 Applicability.

- (A) Part II shall apply to patient care areas of all health care facilities.
- (B) Part II shall not apply to the following:
- (1) Business offices, corridors, waiting rooms, and the like in clinics, medical and dental offices, and outpatient facilities.
- (2) Areas of nursing homes and limited care facilities wired in accordance with Chapters 1 through 4 of this Code where these areas are used exclusively as patient sleeping rooms.

**517-10.1 517.10.1** [For OSHPD 1, 2, 3, & 4] **Applicability.** Part **B** [I] shall apply to hospitals, nursing homes, clinics, and correctional treatment centers.

**Exception:** Part & <u>II</u> shall not apply to business offices, corridors, waiting rooms, and the like in clinics and outpatient facilities.

**517.12 Wiring Methods.** Except as modified in this article, wiring methods shall comply with the applicable requirements of Chapters 1 through 4 of this Code.

(A.1) [For OSHPD 1, 2, & 4] Wall spaces in patient care rooms shall not be used for the installation of switchboards and panelboards, unless dedicated for that room. [This is an existing amendment that is being relocated from Article 110.26(F), Exception No. 2 to this location in Article 517.12]

#### 517-18. 517.18 General Care Areas.

(a) Patient Bed Location. Each patient bed location shall be supplied by at least two branch circuits, one from the emergency system and one from the normal system. All branch circuits from the normal system shall originate in the same panelboard.

(a.1) (A.1) [For OSHPD, 1, 2, 3, & 4] Patient Bed Location Branch Circuits. Each patient bed location where inpatient care is provided shall be supplied by at least two branch circuits, at least one of which originates in a normal panelboard or equipment emergency branch panelboard, and at least one of which originates from the critical branch emergency panelboard.

**Exception No. 1:** Branch circuits serving only special-purpose outlets or receptacles, such as portable X-ray outlets, shall not be required to be served from the same distribution panel or panels.

**Exception No.2:** Requirements of Section 517.18(A) shall not apply to patient bed locations in clinics, medical and dental offices, and outpatient facilities; psychiatric, substance abuse, and rehabilitation hospitals; sleeping rooms of nursing homes and limited care facilities meeting the requirements of Section 517.10(B)(2) [For OSHPD 1, 2, 3, & 4] Section 517.10.1 Exception.

[For OSHPD 1, 2, 3, & 4] **Exception No. 2.1:** Clinics, outpatient facilities, psychiatric, substance abuse, and rehabilitation hospitals, nursing homes, and correctional treatment centers providing only basic services.

**Exception No. 3:** A general care patient bed location served from two separate transfer switches on the emergency system shall not be required to have circuits from the normal system.

(b) (B) Patient Bed Location Receptacles. Each patient bed location shall be provided with a minimum of four receptacles. They shall be permitted to be of the single or duplex types or a combination of both. All receptacles, whether four or more, shall be listed "hospital grade" and so identified. Each receptacle shall be grounded by means of an insulated copper conductor sized in accordance with Table 250.122.

**Exception No. 1:** Requirements of Section 517.18(b) shall not apply to psychiatric, substance abuse, and rehabilitation hospitals meeting the requirements of

517.10(B)(2) [For OSHPD 1, 2, 3, & 4] Section 5107.10.1 Exception.

**Exception No. 2:** Psychiatric security rooms shall not be required to have receptacle outlets installed in the room.

**Exception No. 3:** [For OSHPD 1, 2, & 3] Hospital grade receptacles shall not be required in-patient sleeping areas in nursing homes.

- **(C) Pediatric Locations.** Receptacles located within the patient care areas of pediatric wards, rooms, or areas shall be listed tamper resistant or shall employ a listed tamper resistant cover.
- (d) (D) [For OSHPD 1, 2, & 4] Nursery receptacles. One duplex receptacle shall be provided for every two bassinets.

#### 517-19. 517.19 Critical Care Areas.

- (b) (B) Patient Bed Location Receptacles.
- (1) Minimum Number and Supply. Each patient bed location shall be provided with a minimum of six receptacles, at least one of which shall be connected to either of the following:
- (1) The normal system branch circuit required in 517.19(A)
- (2) An emergency system branch circuit supplied by a different transfer switch than the other receptacles at he same location.

[For OSHPD 1, 2, & 4] **Exception:** Each intensive care newborn nursery bed equivalent and each bed location in intensive care and coronary care units shall be equipped with at least 10 single or 5 duplex receptacles listed "Hospital Grade" and so identified; each receptacle shall be grounded to the reference grounding point by means of an insulated grounding conductor.

### 517-22 517.22 [For OSHPD 1, 2, 3, & 4] **Artificial Lighting.**

- (a) All rooms and passageways shall be provided with artificial illumination.
- **(b)** Illumination intensity values in each area shall meet the recommended values in the latest edition of the Illuminating Engineering Society Handbook.
- **(c) Lamp Protection.** Lamps in fixtures shall be protected against accidental breakage by means of an enclosing lens or diffuser.

**Exception No. 1:** The fixture may be protected by means of louvers with a maximum cell size of 96 square

inches if all part of the fixture are completely recessed above the ceiling or if the fixture is completely recessed in an approved soffit.

**Exception No. 2:** Open bottom luminaries with a maximum opening of 144 square inches if completely recessed above the ceiling or completely recessed in an approved soffit.

**Exception No. 3:** Wall mounted night-lights with louvered covers provided they are completely recessed.

**Exception No. 4:** Wire guards or plastic tube guards in service areas such as electrical rooms, equipment rooms, and janitor closets.

#### (d) Special Locations.

- (1) The general illumination fixtures in nurseries, central sterilizing rooms, treatment rooms, surgical suites, intensive care units, recovery rooms, obstetrical suites, emergency rooms, and laboratories shall be smooth and easily cleanable.
- (2) Lighting in intensive care nurseries shall be controlled by a dimmer or other means of multiple switching to provide varied lighting intensities. Lighting shall have the ability to provide 100 foot-candles at each infant bed location when needed.
- (3) Individual bed area lighting in intensive care and coronary care units shall be controlled by a dimmer or other means of multiple switching, to provide varied lighting intensities.

517-23. [For OSHPD 1, 2, 3, & 4] Receptacles
Powered by the Alternate (Emergency) Source and
Light Switches Controlling Lighting Powered by the
Alternate (Emergency Source. All receptacles
connected to the alternate (emergency) source and all
light switches controlling lighting connected to the
alternate (emergency) source shall be identified in a
conspicuous and permanent manner such as with red
colored plates and/or red colored devices.

### **517-24. 517.24** [For OSHPD 1, 2, 3, & 4] **Mobile Medical Facilities.**

- (a) Feeder. The feeder shall be sized in accordance with the requirements of Article 220.
- **(b)** Service Receptacle. The service receptacle shall be listed and rated for its use.
- (c) Disconnect. A disconnecting means listed and rated for its use shall be located adjacent to and within sight of the service receptacle. It shall be capable of simultaneously disconnecting the ungrounded conductors which supply the service receptacle.

### 517-30. 517.30 Essential Electrical Systems for Hospitals.

(a) (A) Applicability. The requirements of Part III, Sections 517.30 through 517.35, shall apply to hospitals [For OSHPD 1 & 4] and correctional treatment centers providing optional services where an essential electrical system is required.

#### (b) (B) General.

- (7) [For OSHPD 1, 2, & 4] All automatic transfer switches in general acute care hospitals and correctional treatment centers providing optional services shall have provisions for electrically by-passing and isolating the transfer switch. The by-pass switch shall be capable of bypassing loads to the emergency source or normal source if the selected by-pass source voltage is available.
- (d.1) (D.1) [For OSHPD 1, 2, 3, & 4] Capacity of Systems. The essential electrical system shall have adequate capacity to meet the demand for the operation of all functions and equipment to be served by each system and branch.
- **(E) Receptacle Identification.** The cover plates for the electrical receptacles [For OSHPD 1 & 4] and light switches or the electrical receptacles [For OSHPD 1 & 4] and light switches themselves supplied from the emergency system shall have a distinctive color or marking so as to be readily identifiable. [NFPA 99, 3.4.2.2.4(b)2]
- 517-32. 517.32 Life Safety Branch. No function other than those listed in 517.32(A) through (G) shall be connected to the life safety branch. The life safety branch of the emergency system shall supply power for the following lighting, receptacles, and equipment.
- (c) (C) Alarm and Alerting Systems. Alarm and alerting systems including the following:
- (1) Fire alarms
- (2) Alarms required for systems used for the piping of nonflammable medical gases.
- (3) [For OSHPD 1] Seismic switch enunciator(s)
- **(D) Communications Systems.** Hospital communications systems, where used for issuing instructions during emergency conditions.
- **(E)** Generator Set Location. Task illumination battery charger for emergency battery-powered lighting unit(s) and selected receptacles at the generator set location.
- (f) (F) Elevators. Elevator cab lighting, [For OSHPD 1]

elevator machine room lighting, control, communications, [For OSHPD 1] seismic switch, and signal systems.

#### 517-33. 517.33 Critical Branch.

#### (a)(A) Task Illumination and Selected Receptacles.

The critical branch of the emergency system shall supply power for task illumination, fixed equipment, selected receptacles, and special power circuits serving the following areas and functions related to patient care:

. . . .

- (8) Task illumination, selected receptacles, and selected power circuits for the following:
- a. General care beds (at least one duplex receptacle per patient bedroom)
- b. Angiographic labs
- c. Cardiac catheterization labs
- d. Coronary care units
- e. Hemodialysis rooms or areas
- f. Emergency room treatment areas (selected)
- g. Human physiology labs
- h. Intensive care units
- i. Postoperative recovery rooms (selected) [Subsections j through n for OSHPD 1]
- j. Lithotripsy treatment rooms
- k. Laser operating rooms
- I. Electric clocks as required by Part 2, Title 24, C.C.R. m. Food preparation areas, central supply, and utility rooms
- n. Electrical and mechanical rooms
- (9) Additional task illumination, receptacles, and selected power circuits needed for effective hospital operation. Single-phase fractional horsepower motors shall be permitted to be connected to the critical branch. [NFPA 99, 3.4.2.2.2(c)]
- (10) **[For OSHPD 1, 2, 3, & 4]** Sensor-operated fixtures when used to comply with Table 4-2, California Plumbing Code.

**517-34. 517.34 Equipment System Connection to Alternate Power Source.** The equipment system shall be installed and connected to the alternate power source such that the equipment described in 517.34(A) is automatically restored to operation at appropriate time-lag intervals following the energizing of the emergency system. Its arrangement shall also provide for the subsequent connection of equipment described in 517.34(B). [NFPA 99, 3.4.2.2.3(b)]

**Exception:** For essential electrical systems under 150 kVA, deletion of the time-lag intervals feature for delayed

automatic connection to the equipment system shall be permitted.

. . . .

(b) (B) Equipment for Delayed Automatic or Manual Connection. The following equipment shall be arranged for either delayed automatic or manual connection to the alternate power source:

(1) Heating equipment to provide heating for operating, delivery, labor, recovery, intensive care, coronary care, nurseries, infection/isolation rooms, emergency treatment spaces, and general patient rooms and pressure maintenance (jockey or make-up) pump(s) for water based fire protection systems.

**Exception:** Heating of general patient rooms and infection/isolation rooms during disruption of the normal source shall not be required under any of the following conditions:

- (a) The outside design temperature if higher than -6.7°C (20°F).
- (b) The outside design temperature is lower than 6.7°C (20°F), and where a selected room(s) is provided for the needs of all confined patients, only such room(s) need be heated.
- (c) The facility is served by a dual source of normal power.

(1.1) [For OSHPD 1 & 4] Heating, ventilating, and cooling equipment as required by the California Mechanical Code.

(2) An elevator(s) selected ...

### 517-40. 517.40 Essential Electrical Systems for Nursing Homes and Limited Care Facilities.

(a.1)(A.1) [For OSHPD 1, 2, & 4] Applicability. The requirements of Part C, Section 517.40 (c) through 517.44, shall apply to nursing homes, intermediate and skilled nursing facilities, and correctional treatment centers providing only basic services.

#### 517-41 517.41 Essential Electrical Systems.

**(E) Receptacle Identification.** The cover plates for the electrical receptacles [For OSHPD 2 & 4] and light switches or the electrical receptacles [For OSHPD 2 & 4] and light switches themselves supplied from the emergency system shall have a distinctive color or marking so as to be readily identifiable. [NFPA 99, 3-5.2.2.4]

**517-42. 517.42 Automatic Connection to Life Safety Branch.** The life safety branch shall be installed and connected to the alternate source of power so that all functions specified herein shall be automatically restored to operation within 10 seconds after the interruption of the normal source. No functions other than those listed in 517.42(A) through (G) shall be connected to the life safety branch. The life safety branch shall supply power for the following lighting, receptacles, and equipment.

. . . .

- (c) (C) Alarm and Alerting Systems. Alarm and alerting systems, including the following:
- (1) Fire alarms
- (2) Alarms required for systems used for the piping of nonflammable medical gases
- (3) [For OSHPD 1, 2, & 4] The nurses' call system

**517-43. 517.43 Connection to Critical Branch.** The critical branch shall be installed and connected to the alternate power source so that the equipment listed in 517.43(A) shall be automatically restored to operation at appropriate time-lag intervals following the restoration of the life safety branch to operation. Its arrangement shall also provide for the additional connection of equipment listed in 517.43(B) by either delayed automatic or manual operation.

**Exception:** For essential electrical systems under 150 kVA, deletion of the time-lag intervals feature for delayed automatic connection to the equipment system shall be permitted.

- (a) (A) Delayed Automatic Connection. The following equipment shall be connected to the critical branch and shall be arranged for delayed automatic connection to the alternate power source:
- (1) Patient care areas? task illumination and selected receptacles in the following:
  - a. Medication preparation areas
  - b. Pharmacy dispensing areas
  - c. Nurses' stations (unless adequately lighted by corridor luminaries)
- (2) Sump pumps and other equipment required to operate for the safety of major apparatus and associated control systems and alarms
- (3) Smoke control and stair pressurization systems
- (4) Kitchen hood supply and/or exhaust systems, if required to operate during a fire in or under the

hood

- (5) Supply, return and exhaust ventilating systems for airborne infectious isolation rooms.
- (5)(6) [For OSHPD 1, 2, & 4] Selected receptacles in patient room corridors so that any patient bed can be reached with fifty (50) foot extension cord.
- (6)(7) [For OSHPD 1, 2, & 4] Task lighting and at least one receptacle in electrical and mechanical rooms.
- (7)(8) [For OSHPD 1, 2, 3, & 4] Sensor-operated fixtures when used to comply with Table 4-2, California Plumbing Code.
- (b) (B) Delayed Automatic or Manual Connection. The following equipment shall be connected to the critical branch and shall be arranged for either delayed automatic or manual connection to the alternate power source.
- Heating equipment to provide heating for patient rooms.

Exception: Heating of general patient rooms during disruption of the normal source shall not be required under any of the following conditions:

- (a) The outside design temperature is higher than -6.7°C (20°F), or
- (b) The outside design temperature is lower than 6.7°C (20°F) and where a selected room(s) is provided for the needs of all confined patients, only such room(s) need be heated.
- (c) The facility is served by a dual source of normal power as described in 517.44(C), FPN.
- (1.1) [For OSHPD 1, 2, & 4] Heating, ventilating, and cooling equipment as required by California Mechanical Code.

#### 517-44. 517.44 Sources of Power.

• • • •

**(B)** Alternate Source of Power. The alternate source of power shall be a generator(s) driven by some form of prime mover(s) and located on the premises.

Exception No.1: Where the normal source consists of generating units on the premises, the alternate source shall be either another generator set or an external utility service.

Exception No. 2: Nursing homes or limited care facilities meeting the requirements of 517.40(A), Exception, shall be permitted to use battery system or self-contained battery integral with the equipment. [NFPA 99, 3.4.1.1.3, 3.5.1, 16.3.3.2.1, 17.3.3.2.1]

(b.1) (B.1) [For OSHPD 1, 2, & 4] Alternate Source of Power. The alternate source of power shall be generator(s) driven by some form of prime mover(s), and located on the premises.

**Exception No. 1:** Where the normal source consists of generating units on the premises, the alternate source shall be either another generator set, or an external utility service.

### 517-50. 517.45 Essential Electrical Systems for Other Health Care Facilities

- **(D) Power Systems.** Battery systems shall be installed in accordance with the requirements of Article 700, and generator systems shall be as described in 517.30 through 517.35.
- (<u>D.1</u>) [For OSHPD 1, 2, 3, & 4] Exception: Ambulatory surgical clinics shall be provided with a generator with on-site fuel.

#### 517.45

(E) [For OSHPD 3 & 4] Receptacle and Light Switch Identification. The cover plates for the electrical receptacles and light switches or the electrical receptacles and light switches themselves, supplied from the emergency system, shall have a distinctive color or marking so as to be readily identifiable.

### (d) (F) [For OSHPD 1, 2, 3, & 4] Ambulatory Surgical Clinics.

- (1) Illumination of means of egress, exit lights, alarms and alerting systems, nurses' call system, central suction system.
- (2) Task illumination and selected receptacles in: **a.** Operating Rooms; **b.** Recovery Rooms; **c.** Nurses' Stations; **d.** Electrical and mechanical equipment rooms;

and e. Telephone equipment rooms.

- (e) (G) [For OSHPD 1, 2, 3, & 4] Hemodialysis Clinic.
- (1) Illumination for means of egress and exit lights shall be provided, using battery-operated equipment with a capacity to sustain its connected load for a minimum of 1½ hours after loss of the normal source.

**517-123. 517.123** [For OSHPD 1, 2, 3, & 4] **Signal Systems.** Signal systems shall include provisions for visual and audible communications between patients and nursing personnel and between health care facility staff

**Exception No. 1:** In facilities or separate buildings of 6 beds or less, a signal/call system which can be demonstrated to the enforcing agency to function effectively is permitted.

**Exception No. 2:** Acute psychiatric hospitals are not required to install or maintain a signal system if they do not admit or retain patients who are confined to bed.

- (a) Patient/Nurse Call System. The patient/nurse call system shall be comprised of components which include an enunciator located at each nurses' station which emits an audible signal and indicates the origin of the call. The system shall require resetting at the calling station unless a two-way voice communication component is included. Visual signals visible from all parts of the corridor shall be provided above corridor doors to each patient bedroom, toilet room, and bath or shower room. The system shall be provided for at least:
- (1) One call station at each bed in patient bedrooms, labor rooms, intensive care units and coronary care units, capable of being activated by patients confined to bed.
- (2) One call station with cords within 12 inches of the floor in each patient toilet room, bathroom, and shower room in locations easily accessible to patients.

**Exception:** For correctional treatment centers, the call system may be a cordless-type actuator in a location easily accessible to the patient or may be an audio communication system.

- (3) Detachable cords at all call stations in rooms designated for psychiatric patient use.
- **(b) Staff Emergency Call System.** The staff emergency call system shall be comprised of components which provide for at least:
- (1) One call station from each operating, delivery, special procedure, and nursery room connected to the

nearest continuously staffed nurses' station or control desk.

- (2) One call station from the control desk of each recovery room, intensive care unit, neonatal intensive care unit (NICU), and coronary care unit connected to the nearest continuously staffed nurses' station.
- (c) Emergency Alarm System (Code Blue). The emergency alarm system shall be comprised of components which provide for at least:
- (1) One call station at each bed and nurses' station in recovery room, intensive care unit, and coronary care unit
- (2) One call station at the control desk in each neonatal intensive care unit (NICU).
- (3) A unique visual and audible signal at attending nurses' station and above each patient unit or room door.
- (4) Visual and audible signals at the PBX operator or other 24-hour staffed area.

#### **ARTICLE 620**

Elevators, Dumbwaiters, Escalators, Moving Walks, Wheelchair Lifts, and Stairway Chair Lifts

**620.21 Wiring Methods.** Conductors and optical fibers located in hoist ways, in escalator and moving walk well ways, in wheelchair lifts, stairway chair lift runways, machinery spaces, control spaces, in or on cars, in machine rooms and control rooms, not including the traveling cables connecting the car or counterweight and hoist way wiring, shall be installed in rigid metal conduit, intermediate metal conduit, electrical metallic tubing, rigid nonmetallic conduit, or wire ways, or shall be Type MC, MI, or AC cable unless otherwise permitted in 620.21(A) through (C).

#### (A) Elevators.

- (1) Hoist ways. ....
- (2) Cars. ....
- (3) Within Machine Rooms, Control Rooms, and Machinery Spaces and Control Spaces. ....
- (4) Counterweight. Flexible metal conduit, liquid tight flexible metal conduit, liquid tight flexible nonmetallic conduit or flexible cords and cables, or conductors grouped together and taped or corded that are part of listed equipment, a driving machine, or a driving machine brake shall be permitted on the counterweight assembly, in lengths not to exceed 1.8 m (6 ft) without being installed in a raceway and where located to be protected from physical damage and are of a flame-retardant type.

(5) [For OSHPD 1] **Seismic Switches**. Cord-and-plug connections for seismic switches shall not be used.

#### ARTICLE 680 Swimming Pools, Fountains, and Similar Installations

# **680.62** Therapeutic Tubs (Hydrotherapeutic Tanks). Therapeutic tubs, used for the submersion and treatment of patients, that are not easily moved from one place to another in normal use or that are fastened or otherwise secured at a specific location, including

**(g) Receptacles.** All receptacles within 5 ft (1.52 m) of a therapeutic tub shall be protected by a ground-fault circuit interrupter.

associated piping systems, shall conform to this part.

(1) [For OSHPD 1, 2, & 4] Receptacles and light switches shall not be installed within shower rooms or stalls or be accessible from within these areas. Receptacles and switches shall not be installed within 5 feet (1.52 m) of the perimeter of bathtubs.

#### ARTICLE 700 Emergency Systems

700.12 General Requirements. Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency lighting, emergency power, or both shall be available within the time required for the application but not to exceed 10 seconds. The supply system for emergency purposes, in addition to the normal services to the building and meeting the general requirements of this section, shall be one or more of the types of systems described in 700.12(A) through (D). Unit equipment in accordance with 700.12(E) shall satisfy the applicable requirements of this article. In selecting an emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building. Equipment shall be designed and located to minimize the hazards that might cause complete failure due to flooding, fires, icing, and vandalism. Equipment for sources of power as described in 700.12(A) through (D) where located within assembly occupancies for greater than 1000 persons or in buildings above 23 m (75 ft) in height with any of the following occupancy classes — assembly, educational, residential, detention and correctional, business, and mercantile — shall be installed either in spaces fully protected by approved automatic fire suppression

systems (sprinklers, carbon dioxide systems, and so forth), or in spaces with a 1-hour fire rating.

(A) Storage Battery. Storage batteries used as a source of power for emergency systems shall be of suitable rating and capacity to supply and maintain the total load for a period of 1 ½ hours minimum, without the voltage applied to the load falling below 87 ½ percent of normal.

Batteries, whether of the acid or alkali type, shall be designed and constructed to meet the requirements of emergency service and shall be compatible with the charger for that particular installation.

For a sealed battery, the container shall not be required to be transparent. However, for the lead acid battery that requires water additions, transparent or translucent jars shall be furnished. Automotive-type batteries shall not be used.

An automatic battery charging means shall be provided.

#### (B) Generator Set.

- (1) Prime Mover-Driven. For a generator set driven by a prime mover acceptable to the authority having jurisdiction and sized in accordance with 700.5, means shall be provided for automatically starting the prime mover on failure of the normal service and for automatic transfer and operation of all required electrical circuits. A time-delay feature permitting a 15-minute setting shall be provided to avoid retransfer in case of short-time reestablishment of the normal source.
- (2) Internal Combustion as Prime Movers. Where internal combustion engines are used as the prime mover, an on-site fuel supply shall be provided with an on-premise fuel supply sufficient for not less than 2 hours' full-demand operation of the system. Where power is needed for the operation of the fuel transfer pumps to deliver fuel to a generator set day tank, this pump shall be connected to the emergency power system.

#### [Exceptions for OSHPD 1, 2, 3, & 4]....

**Exception No. 1:** The on-premise fuel supply shall be sufficient for not less than 24 hours full-demand operation in acute general care hospitals and correctional treatment centers that provide optional services. For acute care hospital facilities required to meet NPC-5, the on-premise fuel supply shall be sufficient for not less than 72 hours full-demand operations.

Exception No. 2: The on-premise fuel supply shall be

sufficient for not less than 6 hours full-demand operation in the following health facilities of seven or more beds: correctional treatment centers that provide only basic services, acute psychiatric hospitals, intermediate care facilities, and skilled nursing facilities.

**Exception No. 3:** The on-premise fuel supply shall be sufficient for not less than 4 hours full-demand operation in ambulatory surgical clinics.

...

#### Notation

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850 and Government Code Section 11152.5.

Reference(s): Health and Safety Code Sections 18928 and 129850.

#### **MATRIX TABLES**

#### ARTICLE 080—ADMINISTRATION AND ENFORCEMENT

ENFORCING AUTHORITY		Bu	oca ildii fici	ng	Local Fire Official	Local Health Official		State Agency					
ADOPTING AGENCY	HCD			DSA			DSA		OSH	IPD		*	
	1	1/A C	2	AC	SFM	DHS	SS	1	2	3	4	DOSH	BSC
Adopts entire NEC article without amendments								<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)													
Adopt only those sections which are listed below													

#### **ARTICLE 089—ADMINISTRATION**

ENFORCING AUTHORITY		Bu	oca ildi fici	ng	Local Fire Official	State Agency							
		HCD		DSA			DSA		OSH	PD		*	
ADOPTING AGENCY	1	1/A C	2	AC	SFM	DHS	SS	1	2	3	4	DOSH	BSC
Adopt entire State article without amendments								<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)													
Adopt only those sections which are listed below													
089-7.3B CA													
089-1 through 089-6 CA								X	X	X	X		
<del>089-7-#7</del> CA								X	X	X	X		
<del>089-8 through 089-11</del> CA								X	X	X	X		

#### **ARTICLE 90—INTRODUCTION**

ENFORCING AUTHORITY		Offi	cal ding cial	Local Fire Official	Local Health Official	State Agency							
ADOPTING AGENCY	H	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC	
	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС	
Adopts entire NEC article without amendments							Х	Χ	Х	Х			
Adopt entire NEC article as amended (amendments listed below)													
Adopt only those sections which are listed below													

#### **ARTICLE 100—DEFINITIONS**

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official	State Agency								
ADOPTING AGENCY	Н	CD	DSA	SFM	DUE	DSA		OSF	IPD		*	BSC		
ADOF TING AGENCT	1	2	AC	SFM DHS	Dilo	SS	1	2	3	4	DOSH '	ВЗС		
Adopts entire NEC article without amendments							Х	Х	Х	Х				
Adopt entire NEC article as amended (amendments listed below)														
Adopt only those sections which are listed below														

### ARTICLE 110—REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official	State Agency								
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC		
ADOI TINO AGENCT	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH			
Adopts entire NEC article without amendments									Χ					
Adopt entire NEC article as amended (amendments listed below)							Х	Х		Х				
Adopt only those sections which are listed below														
110.13(C) CA							Х	Х		Χ				
<del>110.26(F)</del> CA							X	X		X				

### ARTICLE 200—USE AND IDENTIFICATION OF GROUNDED CONDUCTORS

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official	State Agency							
ADOPTING AGENCY	HCD		DSA	SFM	DUG	DSA		OSH	IPD		*	BSC	
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС	
Adopts entire NEC article without amendments							Х	Х	Х	Х			
Adopt entire NEC article as amended (amendments listed below)													
Adopt only those sections which are listed below													

### **ARTICLE 210—BRANCH CIRCUITS**

ENFORCING AUTHORITY		Offi	ding cial	Local Fire Official	Local Health Official		\$	State		су	l *	
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI IIITO AGENTI	1	2	AC	OI III	5110	SS	1	2	3	4	DOSH	500
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 215—FEEDERS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 220—BRANCH-CIRCUIT, FEEDER AND SERVICE CALCULATIONS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State /	Agen	су		
ADOPTING AGENCY	Н	HCD DSA AC		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 225—OUTSIDE BRANCH CIRCUITS AND FEEDERS

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		ş	State	Ager	су		
ADOPTING AGENCY	Н	1 2071		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE—230-SERVICES

ENFORCING AUTHORITY		Local Building Official HCD DSA		Local Fire Official	Local Health Official		Ş	State /	Ager	су		
ADOPTING AGENCY	Н	1 20/1		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 240—OVERCURRENT PROTECTION**

			AKTIC	LE 240—OVE	RCURRENT PR	OTECTION						
ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		5	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE-250—GROUNDING

ENFORCING AUTHORITY		Local Building Official HCD DSA		Local Fire Official	Local Health Official		,	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 280—SURGE ARRESTERS**

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	1000		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI W	Diio	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 285—TRANSIENT VOLTAGE SURGE SUPPRESSORS: TVSSs

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		S	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	PD		*	BSC
	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	500
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												

# ARTICLE 285—TRANSIENT VOLTAGE SURGE SUPPRESSORS: TVSSs

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		(	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI W	Diio	SS	1	2	3	4	DOSH	
Adopt only those sections which are listed below												

# **ARTICLE 300—WIRING METHODS**

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		\$	State	Agen	су		
ADOPTING AGENCY	Н	1000		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### **ARTICLE 305—TEMPORARY WIRING**

ENFORCING AUTHORITY		HCD DSA		Local Fire Official	Local Health Official		ę	State	Ager	i <del>cy</del>		
ADOPTING AGENCY	H	1000		SFM	DHS	DSA		OSF	IPD		<u>*</u>	BSC
ADOF HING AGENCT	1	2	AC	<del>JEWI</del>	<del>ынэ</del>	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 310—CONDUCTORS FOR GENERAL WIRING

ENFOR( AUTHO	_	Local Building Official	Local Fire Official	Local Health Official	State Agency
		Official	Official	Official	

ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOI TINO AGENTI	1	2	AC	OI III	DI IO	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 312—CABINETS, CUTOUT BOXES, AND METER SOCKET ENCLOSURES

ENFORCING AUTHORITY	AUTHORITY Building Official		ding	Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSF	IPD		*	BSC
	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 314—OUTLET, DEVICE, PULL, AND JUNCTION BOXES; CONDUIT BODIES; FITTINGS; AND MANHOLES

ENFORCING AUTHORITY	Local Building Official		ding	Local Fire Official	Local Health Official		\$	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 318—CABLE TRAYS**

ENFORCING AUTHORITY	Local Building Official HCD			Local Fire Official	Local Health Official		ę	State /	Agen	<del>су</del>		
ADOPTING AGENCY	H	CD	DSA	SEM	DHS	DSA		<del>OS</del> ⊨	IPD		<u>*</u>	BSC
ADOF HING AGENCT	1	2	AC	<del>JEWI</del>	<del>ынэ</del>	<del>SS</del>	4	2	3	4	DOSH	<del>836</del>
Adopts entire NEC												
article without amendments												
Adopt entire NEC article as amended (amendments listed below)							X	X	X	X		
Adopt only those sections which are listed below												
318-4 CA							X	X	X	X		

# ARTICLE 320—OPEN WIRING ON INSULATORS ARMORE CABLE: TYPE AC

AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Ager	су		
ADOPTING ACENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
Adopts entire NFC	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 321—MESSENGER SUPPORTED WIRING

				-								
ENFORCING AUTHORITY		Local Building Official		<del>Local</del> <del>Fire</del> <del>Official</del>	<del>Local</del> Health Official		ę	State	Agen	су		
ADOPTING AGENCY	H	CD	DSA	SFM	DHS	DSA		OSF	IPD		<u>*</u>	BSC
ABOT TINO AGENOT	1	2	AC	<del>Or III</del>	<del>БПО</del>	SS	1	2	3	4	DOSH	500
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections												

# ARTICLE 321—MESSENGER SUPPORTED WIRING

ENFORCING AUTHORITY		Lo Buik Offi	ding	Local Fire Official	Local Health Official		ę	State /	Agen	<del>ıсу</del>		
ADOPTING AGENCY	H	CĐ	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCY	1	2	AC	OI III	51.0	SS	4	2	3	4	DOSH	
which are listed below												

# ARTICLE 322—FLAT CABLE ASSEMBLIES: TYPE FC

	יות		LL JZ	Z ILAI OA	DLE ASSEIVIE	LILO. I II						
ENFORCING AUTHORITY	Local Building Official		ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE 324—CONCEALED KNOB AND TUBE WIRINGFLAT CONDUCTOR CABLE: TYPE FCC

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY		CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 325—INTEGRATED GAS SPACER CABLE**

ENFORCING AUTHORITY	AUTHORITY Building Official		Local Fire Official	Local Health Official		Ş	State	Ager	су			
ADOPTING ACENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
Adonts entire NEC	1	2	AC	SFIVI	טחט	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE 326—MEDIUM VOLTAGE CABLE INTEGRATED GAS SPACER CABLE: TYPE IGS

AITHOLL OLO	ANTICLE 320 WIEDOW VCETAGE CABLE INTEGRATED GAS SPACEN CABLE. TIPE IGS													
ENFORCING AUTHORITY	Local Building Official		Local Fire Official	Local Health Official		\$	State /	Agen	су					
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC		
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС		
Adopts entire NEC article without amendments							Х	Х	Х	Х				
Adopt entire NEC article as amended (amendments listed below)														
Adopt only those sections which are listed below														

# ARTICLE 328—FLAT CONDUCTOR CABLE MEDIUM VOLTAGE CABLE: TYPE MV

ARTICLE	320	0—F	LAI U	JINDUCTUR C	ABLE <u>MEDIUM</u>	VOLTAGE C	ADLE	<u>:                                      </u>				
ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		\$	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSF	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections												

# ARTICLE 328—FLAT CONDUCTOR CABLE MEDIUM VOLTAGE CABLE: TYPE MV

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		S	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
	1	2	AC	OI III	DI IO	SS	1	2	3	4	DOSH	500
which are listed below												

### ARTICLE 330-MINERAL-INSULATED, METAL-SHEATHED CABLE METAL-CLAD CABLE: TYPE MC

ENFORCING AUTHORITY		Local Building Official HCD DSA		Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### **ARTICLE 331—ELECTRICAL NONMETALLIC TUBING**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		\$	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSF	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	טחס	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments												
Adopt entire NEC article as amended (amendments listed below)							X	X	X	X		
Adopt only those sections which are listed below												
331-4(10) CA							X	X	X	X		

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 333—ARMORED CABLE: TYPE AC**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State /	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 334—METAL-CLAD CABLE NONMETALLIC-SHEATHED CABLE: TYPES NM, NMC, AND NMS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		5	State /	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Diio	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Χ		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 336—NONMETALLIC-SHEATHED CABLE POWER AND CONTROL TRAY CABLE: TYPE TC

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 338—SERVICE-ENTRANCE CABLE: TYPES SE AND USE

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		ş	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 339—UNDERGROUND FEEDER AND BRANCH-CIRCUIT CABLE

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official			State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENCT	1	2	AC	OI W	Diio	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 340—POWER AND CONTROL TRAY CABLE: TYPE TC UNDERGROUND FEEDER AND BRANCH-CIRCUIT CABLE: TYPE UF

ENFORCING AUTHORITY	l	Building Official HCD DSA		Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	טחס	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 342—NONMETALLIC EXTENSIONS INTERMEDIATE METAL CONDUIT: TYPE IMC

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		State Agency					
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)							X	X	X	X		
Adopt only those sections which are listed below												
<del>342-4(f)</del> CA							X	X	X	X		

### ARTICLE 343—NONMETALLIC UNDERGROUND CONDUIT WITH CONNECTORS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 344—RIGID METAL CONDUIT: TYPE RMC

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		ş	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 345—INTERMEDIATE METAL CONDUIT

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### **ARTICLE 346—RIGID METAL CONDUIT**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	H	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 347—RIGID NONMETALLIC CONDUIT**

ENFORCING AUTHORITY	Local Building Official HCD DSA			Local Fire Official	Local Health Official		\$	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												
<del>347-3(g)</del> CA							X	X	X	X		

# ARTICLE 348—ELECTRICAL METALLIC TUBING FLEXIBLE METAL CONDUIT: TYPE FMC

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		\$	State	Ager	су		
ADOPTING AGENCY	Н	1 207	SFM	DHS	DSA		OSH	IPD		*	BSC	
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 349—FLEXIBLE METALLIC TUBING**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		S	State <i>i</i>	Agen	су		
ADOPTING AGENCY	Н	ICD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCY	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

#### **ARTICLE 349—FLEXIBLE METALLIC TUBING**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	Ö	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENOT	1	2	AC	OI III	Dilo	SS	1	2	3	4	DOSH	

#### ARTICLE 350—FLEXIBLE METAL CONDUIT LIQUIDTIGHT FLEXIBLE METAL CONDUIT: TYPE LFMC

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

#### ARTICLE 351—LIQUIDTIGHT FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT

	Buile	ding	Local Fire Official	Local Health Official		\$	State	Ager	су		
Н	CD	DSA	SEM	DHG	DSA		OSH	IPD		*	BSC
1	2	AC	SFM	DHS	SS	1	2	3	4	DOSH	ВЗС
						X	X	X	X		
	H-1	Build Offi HCD	1 2 AC	Building Fire Official  HCD DSA AC SFM	Building Fire Health Official  HCD DSA AC SFM DHS	Building Official Fire Official Official  HCD DSA AC SFM DHS SS	Building Official         Fire Official         Health Official         S           HCD DSA AC         SFM DHS         DSA SS         1	Building Official         Fire Official         Health Official         State And Official           HCD DSA 1 2         AC         SFM DHS         DSA SS         1         2           1 2 X         X         X         X         X         X	Building Official         Fire Official         Health Official         State Agen           HCD         DSA AC         SFM         DHS         DSA SS         1         2         3	Building Official         Fire Official         Health Official         State Agency           HCD DSA AC         SFM         DHS         DSA SS         0SHPD           1 2 3 4         Y Y Y Y         Y Y Y Y	Building Official         Fire Official         Health Official         State Agency           HCD DSA AC         SFM         DHS         DSA SS         1 2 3 4 DOSH           1 2 X X X X X         Y X X X X         Y X X X

ARTICLE 352—SURFACE METAL RACEWAYS AND SURFACE NONMETALLIC RACEWAYS
RIGID NONMETALLIC CONDUIT: TYPE RNC

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENOT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments												
Adopt entire NEC article as amended (amendments listed below)							X	Х	X	X		
Adopt only those sections which are listed below												
352-22(b) 352.12(G) CA							Χ	Χ	Χ	Χ		

# **ARTICLE 353—MULTIOUTLET ASSEMBLY**

				<u></u>								
ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSF	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	טחס	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments												
Adopt entire NEC article as amended (amendments listed below)							X	X	X	X		
Adopt only those sections which are listed below												
<del>353-2(b)</del> CA							X	X	X	X		

# ARTICLE 354—UNDERFLOOR RACEWAYS NONMETALLIC UNDERGROUND CONDUIT WITH CONDUCTORS: TYPE NUCC

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency  DSA OSHPD						
ADOPTING AGENCY	Н	ICD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 354—UNDERFLOOR RACEWAYS NONMETALLIC UNDERGROUND CONDUIT WITH CONDUCTORS: TYPE NUCC

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State /	Agen	су			
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA OSHPD * BS							
ADDITING AGENCY	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Воо	

# ARTICLE 356—CELLULAR METAL FLOOR RACEWAYS LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT: TYPE LFNC

	ding cial	Fire Official	Local Health Official	State Agency						
ICD DSA	CEM	חחפ	DSA		OSH	IPD		*	BSC	
2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
					Х	Х	Х	Х		
	D		D DSA SFM	D DSA SFM DHS	D DSA SFM DHS DSA	D DSA SFM DHS DSA SS 1	D	D DSA 2         SFM         DHS         DSA SS         OSHPD 1           1         2         3	D  DSA   SFM   DHS   DSA   SS   1   2   3   4	D  DSA   SFM   DHS   DSA   SS   1   2   3   4   DOSH

# ARTICLE 358—CELLULAR CONCRETE FLOOR RACEWAYS ELECTRICAL METALLIC TUBING: TYPE EMT

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Ager				су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Diio	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

ARTICLE 360—FLEXIBLE METALLIC TUBING: TYPE FMT

ENFORCING AUTHORITY		Loc Build Offic	ding	Local Fire Official	Local Health Official		State Agency OSHPD					
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 362—METAL WIREWAYS AND NONMETALLIC WIREWAYS ELECTRICAL NONMETALLIC TUBING: TYPE ENT

					TO TODING							
ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official	State Agency						
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)							X	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt only those sections which are listed below												
362.12(11) <u>CA</u>							<u>X</u>	X	X	X		

# ARTICLE 363—FLAT CABLE ASSEMBLIES: TYPE FC

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency			су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCY	1	2	AC	OI W	DIIO	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 363—FLAT CABLE ASSEMBLIES: TYPE FC

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency								
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC		
ADDI TING AGENOT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Воо		

# **ARTICLE 364—BUSWAYS**

ENFORCING AUTHORITY	l		cal ding cial	Local Fire Official	Local Health Official		ş	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 365—CABLEBUS**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency					
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

**ARTICLE 366—AUXILIARY GUTTERS** 

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 368—BUSWAYS**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency  DSA OSHPD						
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 370—OUTLET, DEVICE, PULL AND JUNCTION BOXES, CONDUIT BODIES AND FITTINGS <u>CABLEBUS</u>

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency OSHPD					
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE 372—CELLULAR CONCRETE FLOOR RACEWAYS

	Build	ding	Local Fire Official	Local Health Official		State Agency					
H	CD	DSA	SEM	DHG	DSA		OSH	IPD		*	BSC
1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
						<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
		Build Offi HCD	1001	Building Fire Official Official HCD DSA SFM	Building Fire Health Official Official HCD DSA SFM DHS	Building Fire Health Official Official  HCD DSA SFM DHS DSA	Building Official Official Official  HCD DSA 1 2 AC SFM DHS DSA SS 1	Building Official Fire Official Official  HCD DSA 1 2 AC SFM DHS DSA SS 1 2	Building Official Fire Official Official  HCD DSA 1 2 AC SFM DHS DSA SS 1 2 3	Building Official Fire Official Official  HCD DSA 1 2 AC SFM DHS DSA SS 1 2 3 4	Building Official Fire Official Official State Agency  Official Official DSA  1 2 AC SFM DHS DSA SS 1 2 3 4 DOSH

# ARTICLE 373—CABINETS, CUTOUT BOXES AND METER SOCKET ENCLOSURES

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency					
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE 374—AUXILIARY GUTTERS CELLULAR METAL FLOOR RACEWAY

AITHUL	_ `	·· ·	, , ,	# (1 ( ) OO     E	OLLLOLAIT		<b>913 137</b>	<u> </u>	<u></u>			
ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	HCD DSA	SEM	DHG	DSA		OSH	IPD		*	BSC	
ADOPTING AGENCY	1	2	AC	SFM DHS		SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 376—METAL WIREWAYS**

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		Ş	State /	Ager	су		
ADOPTING AGENCY	Н	HCD DSA AC		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 378—NONMETALLIC WIREWAYS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 380—SWITCHES MULTIOUTLET ASSEMBLY

ENFORCING AUTHORITY	l	Loc Build Offi	ding	Local Fire Official	Local Health Official	State Agency  OSHPD *						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							X	X	X	X		
Adopt entire NEC article as amended (amendments listed below)							<u>X</u>	<u>X</u>	<u>X</u>	X		
Adopt only those sections which are listed below												
380.2 (B)(7) CA							<u>X</u>	X	<u>X</u>	<u>X</u>		

**ARTICLE 382—NONMETALLIC EXTENSIONS** 

			AITH	LL JUL 1101	IVIL I ALLIC LA	LINGIGING						
ENFORCING AUTHORITY		Buile	cal ding cial	Local Fire Official	Local Health Official		State Agency OSHPD					
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments												
Adopt entire NEC article as amended (amendments listed below)							<u>X</u>	<u>X</u>	<u>X</u>	X		
Adopt only those sections which are listed below												
382.12(5) <u>CA</u>							X	X	X	X		

# ARTICLE 384—SWITCHBOARDS AND PANELBOARDS STRUT-TYPE CHANNEL RACEWAY

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency OSHPD					
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENCI	1	2	AC	OI IVI	Diio	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

ARTICLE 386—SURFACE METAL RACEWAYS

			<u>/ (  (       )</u>	000 00.1	ACL WILTAL IV	<u> </u>						
ENFORCING AUTHORITY	!		cal ding cial	Local Fire Official	Local Health Official		State Agency  DSA OSHPD					
ADOPTING AGENCY	Н	CD DSA AC		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

ARTICLE 386—SURFACE METAL RACEWAYS

ENFORCING AUTHORITY	Bu	ocal ilding ficial	Local Fire Official	Local Health Official	State Agency							
ADOPTING AGENCY	HCD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC	
	1 2	AC	OI III	5110	SS	1	2	3	4	DOSH		

**ARTICLE 388—SURFACE NONMETALLIC RACEWAYS** 

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official	State Agency  OSHPD						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments												
Adopt entire NEC article as amended (amendments listed below)							X	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt only those sections which are listed below												
388.12(8) <u>CA</u>							<u>X</u>	X	X	X		

ARTICLE 390—UNDERFLOOR RACEWAYS

			AIVII	CLL 390—011	DERFLOOR RA	NACLIVATO								
ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су				
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC		
ADOF TING AGENCT	1	2	AC	OI IVI	Diio	SS	1	2	3	4	DOSH	ВЗС		
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
Adopt entire NEC article as amended (amendments listed below)														
Adopt only those sections which are listed below														

**ARTICLE 392—CABLE TRAYS** 

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official			State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENOT	1	2	AC	OI IVI	Dilo	SS	1 2 3 4			4	DOSH	500
Adopts entire NEC article without amendments												
Adopt entire NEC article as amended (amendments listed below)							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt only those sections which are listed below												
<u>392.4</u> <u>CA</u>							X	X	X	<u>X</u>		

# ARTICLE 394—CONCEALED KNOB-AND-TUBE WIRING

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		ş	State /	Agen	су		
ADOPTING AGENCY	Н	CD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 396—MESSENGER SUPPORTED WIRING

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	Η	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	ВОС
Adopts entire NEC article without amendments							X	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 396—MESSENGER SUPPORTED WIRING

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	

#### ARTICLE 398—OPEN WIRING ON INSULATORS

			VIV I IOE	L COC CI LIV	WIINING CIN IN	OOLATORO						
ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		5	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

#### ARTICLE 400—FLEXIBLE CORDS AND CABLES

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS DSA OSHPD					*	BSC	
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

**ARTICLE 402—FIXTURE WIRES** 

84

ENFORCING AUTHORITY			al ding cial	Local Fire Official	Local Health Official		State Agency  DSA OSHPD *					
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENCI	1	2	AC	OI IVI	Diio	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### **ARTICLE 404—SWITCHES**

ENFORCING AUTHORITY	l		cal ding cial	Local Fire Official	Local Health Official	State Agency  DSA OSHPD *						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments									<u>X</u>			
Adopt entire NEC article as amended (amendments listed below)							<u>X</u>	<u>X</u>		<u>X</u>		
Adopt only those sections which are listed below												
404.8(A.1) <u>CA</u>						_	X	X		Χ		

# ARTICLE 406—RECEPTACLES, CORD CONNECTORS, AND ATTACHMENT PLUGS (CAPS)

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official		\$	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCY	1	2	AC	OI W	Dilo	SS	1	OSHPD  1 2 3 4			DOSH	Вос
Adopts entire NEC article without amendments									<u>X</u>			
Adopt entire NEC article as amended (amendments listed below)							<u>X</u>	<u>X</u>		<u>X</u>		
Adopt only those sections which are listed below												

ARTICLE 406—RECEPTACLES, CORD CONNECTORS, AND ATTACHMENT PLUGS (CAPS)

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State A	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	
406.8(C.1) CA							X X X			Χ		

ARTICLE 408—SWITCHBOARDS AND PANELBOARDS

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		,	State .	Ager	су		
ADOPTING AGENCY	Н	100		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

ARTICLE 410—<u>LUMINAIRES (</u>LIGHTING FIXTURES), LAMPHOLDERS, <u>AND LAMPS, AND RECEPTACLES</u>

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

ENFORCING AUTHORITY	l	Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State /	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 422—APPLIANCES**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency  DSA OSHPD					
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 424—FIXED ELECTRIC SPACE-HEATING EQUIPMENT

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State /	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Diio	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE 426—FIXED OUTDOOR ELECTRIC DEICING AND SNOW-MELTING EQUIPMENT

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 427—FIXED ELECTRIC HEATING EQUIPMENT FOR PIPELINES AND VESSELS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 430—MOTORS, MOTOR CIRCUITS AND CONTROLLERS

	• • • • •											
ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		S	State /	Agen	су		
ADOPTING AGENCY	Н		DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												
												ĺ

### ARTICLE 440—AIR-CONDITIONING AND REFRIGERATING EQUIPMENT

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 445—GENERATORS**

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 450—TRANSFORMERS AND TRANSFORMER VAULTS (INCLUDING SECONDARY TIES)

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 455—PHASE CONVERTERS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 460—CAPACITORS**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		\$	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 470—RESISTORS AND REACTORS

ENFORCING AUTHORITY		Offi	ding	Local Fire Official	Local Health Official		State Agenc			су		
ADOPTING AGENCY	H	SFM DHS		IPD		*	BSC					
ADOI TINO AGENTI	1	2	AC	OI III	DI IO	SS	1	2	3	4	DOSH	ВОО
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 480—STORAGE BATTERIES**

	Build	ding	Local Fire Official	Local Health Official		S	State /	Ager	су		
Н	CD	DSA	SEM	DHG	DSA		OSH	IPD		*	BSC
1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
						Х	Χ	Х	Х		
	H-1	Build Offi HCD	1 2 AC	Building Fire Official  HCD DSA AC SFM	Building Fire Health Official  HCD DSA AC SFM DHS	Building Official Official Official  HCD DSA AC SFM DHS SS	Building Official         Fire Official         Health Official         S           HCD DSA AC         SFM DHS         DSA SS         1	Building Official         Fire Official         Health Official         State           HCD DSA 1 2         AC         SFM         DHS         DSA SS         1         2	Building Official         Fire Official         Health Official         State Agen           HCD         DSA AC         SFM         DHS         DSA SS         1         2         3	Building Official         Fire Official         Health Official         State Agency           HCD DSA AC         SFM         DHS         DSA SS         0SHPD           1 2 3 4         Y Y Y Y         Y Y Y Y	Building Official         Fire Official         Health Official         State Agency           HCD DSA AC         SFM         DHS         DSA SS         1 2 3 4 DOSH           1 2 X X X X X         Y X X X X         Y X X X

# ARTICLE 490—EQUIPMENT, OVER 600 VOLTS, NOMINAL

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		S	State /	Agen	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 500—HAZARDOUS (CLASSIFIED) LOCATIONS, CLASSES I, II AND III, DIVISIONS 1 AND 2

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												

# ARTICLE 500—HAZARDOUS (CLASSIFIED) LOCATIONS, CLASSES I, II AND III, DIVISIONS 1 AND 2

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State A	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
	1	2	AC	<u> </u>		SS	1	2	3	4	DOSH	
Adopt only those sections which are listed below												

# **ARTICLE 501—CLASS I LOCATIONS**

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		S	State /	Ager	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 502—CLASS II LOCATIONS**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency OSHPD			су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

ARTICLE 503—CLASS III LOCATIONS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		8	State	Ager	су		
ADOPTING AGENCY	H	CD DSA AC		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENCI	1	2	AC	OI W	Diio	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 504—INTRINSICALLY SAFE SYSTEMS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency  OSHPD			су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI W	Diio	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 505—CLASS I, ZONE 0, 1, AND 2 LOCATIONS

		AN I	ICLE 3	00—CLA33 i, i	ZONE U, I, ANL	2 LOCATIC	NI O					
ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency  DSA OSHPD *						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 505—CLASS I, ZONE 0, 1, AND 2 LOCATIONS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State	Agen	су			
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA OSHPD * BSC							
ADDITING AGENCI	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH		

# ARTICLE 510—HAZARDOUS (CLASSIFIED) LOCATIONS—SPECIFIC

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	100		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	סחט	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

#### ARTICLE 511—COMMERCIAL GARAGES, REPAIR AND STORAGE

					O, 11 17 10 20, 112							
ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official	State Agency						
ADOPTING AGENCY	HCD		DSA	SFM	DHS	DSA	OSHPD				*	BSC
	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

ARTICLE 513—AIRCRAFT HANGARS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 514—GASOLINE DISPENSING AND SERVICE STATIONS MOTOR FUEL DISPENSING FACILITIES

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		5	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 515—BULK STORAGE PLANTS**

			ARI	ICLE 313—BU	JLK STUKAGE	NAGE FLANIS										
ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Ager	су						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC				
ADOPTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС				
Adopts entire NEC article without amendments							Х	Х	Х	Х						
Adopt entire NEC article as amended (amendments listed below)																
Adopt only those sections which are listed below																

# ARTICLE 517—HEALTH CARE FACILITIES

ENFORCING AUTHORITY					Local Fire Official	Local Health Official		5	State	Ager	су		
A DODTING A OFNIO			CD	DSA			DSA		OSF	IPD		*	200
ADOPTING AGENC	Υ	1	2	AC	SFM	DHS	SS	1	2	3	4	DOSH	BSC
Adopts entire NEC													
article without amend													
Adopt entire NEC artic amended (amendmen listed below)	le as its							X	Х	X	X		
Adopt only those section													
which are listed below													
	CA							X	Х	Χ	Х		
	CA							X	Χ		Χ		
517.10.1	CA							X	Χ	Х	Χ		
<u>517.12(A.1)</u>	<u>CA</u>							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
517.18 <del>(a.1)</del> <u>(a)</u>	٥.							Х	Χ	Х	Χ		
·	CA							ļ /\					
517.18 <del>(b)</del> <u>(B)</u> excep. 1	CA							X	Χ	Χ	Χ		
•	CA							Х	Χ	Х			
- ' '	CA							X	Х		Х		
517 19(b) (B)													
excep. 1	CA							X	Х		Х		
	CA							Х	Х	Χ	Χ		
517.30 <del>(a)</del> <u>(A)</u>	CA							Х			Χ		
517.30 <del>(b)</del> <u>(B)</u> 7	CA							Х	Χ		Χ		
517.30 <del>(d.1)</del> <u>(D.1)</u>	CA							Х	Х	Χ	Χ		
517.30(E)	CA							Х			Χ		
517.32(c) (C)(3)	CA							X					
	CA							X					
- '	CA							X					
517.33 <del>(a)</del> (A)(10)	CA							X	Х	Х	Х		
	CA							X			X		
	CA							X	Х		X		
	CA							\ \ \	<u>X</u>		<u>X</u>		
517.42 <del>(c)</del> (C)(3)	CA							X	X		X		
E17 12(a) E 9 C (A) C													
87	CA							X	Х		Х		
517.43 <del>(a)(7)</del> (A)(8)	CA							Х	Х	Χ	Χ		
517.43 <del>(b)</del> <u>(B)</u> (1.1)	CA							Х	Χ		Χ		
517.44 <del>(b.1)</del> (B.1)	CA							Х	Χ		Χ		
517. <del>50(c)(1)</del> 45(D.1)	CA							Х	Χ	Χ	Χ		
	CA							1		Χ	X		
547 50(-I) (-) 45(F) 0	CA							Х	Х	X	X		
	CA							Х	Χ	Х	Х		
		l	l			1	I	1 / 1		` `	_ , `	1	

# ARTICLE 517—HEALTH CARE FACILITIES

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Воо

# ARTICLE 530—MOTION PICTURE AND TELEVISION STUDIES AND SIMILAR LOCATIONS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	סחט	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							n/a	n/a	n/a	n/a		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 540—MOTION PICTURE PROJECTORS PROJECTION ROOMS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 545—MANUFACTURED BUILDINGS**

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		S	State	Agen	су		
ADOPTING AGENCY	H	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENCI	1	2	AC	OI III	51.0	SS				DOSH		
Adopts entire NEC article without amendments							Х	Х	Х	X		

# **ARTICLE 545—MANUFACTURED BUILDINGS**

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	Н	CD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGLINOT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Вос
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 547—AGRICULTURAL BUILDINGS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							n/a	n/a	n/a	n/a		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 550—MOBILE HOMES, MANUFACTURED HOMES, AND MOBILE HOME PARKS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State	Agen	су		
ADOPTING AGENCY	H	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 551—RECREATIONAL VEHICLES AND RECREATIONAL VEHICLE PARKS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		,	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							n/a	n/a	n/a	n/a		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 552—PARK TRAILERS**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 553—FLOATING BUILDINGS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		(	State /	Ager	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							n/a	n/a	n/a	n/a		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 555—MARINAS AND BOATYARDS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency  DSA OSHPD *						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							n/a	n/a	n/a	n/a		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 600—ELECTRIC SIGNS AND OUTLINE LIGHTING

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State				
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 604—MANUFACTURED WIRING SYSTEMS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency OSHPD					
ADOPTING AGENCY	HCD DSA			SFM	DHS	DSA		OSH	IPD		*	BSC
ADOPTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												
Adopt entire NEC article as amended (amendments listed below)  Adopt only those sections							X	X	X		X	X

# ARTICLE 605—OFFICE FURNISHINGS (CONSISTING OF LIGHTING ACCESSORIES AND WIRED PARTITIONS)

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 610—CRANES AND HOISTS

_		Official	Official		State Agency					
D	DSA	SEM	DHG	DSA	1	OSH	IPD		*	BSC
2	AC	SFIVI	DHO	SS	1	2	3	4	DOSH	ВЗС
					Х	Х	Χ	Х		
	D 2		SFM	SFM   DHS	— SFM DHS	2 AC SFM DHS SS 1	2 AC SFM DHS SS 1 2	2 AC SFM DHS SS 1 2 3	2 AC SFM DHS SS 1 2 3 4	2 AC SFM DHS SS 1 2 3 4 DOSH

# ARTICLE 620—ELEVATORS, DUMBWAITERS, ESCALATORS, MOVING WALKS, WHEELCHAIR LIFTS, AND STAIRWAY CHAIR LIFTS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency  OSHPD *						
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments								Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)							Х					
Adopt only those sections which are listed below												
620-21 (a)(A)(5) CA							Χ					

# ARTICLE 625A—ELECTRIC VEHICLE CHARGING SYSTEM EQUIPMENT

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State /	Agen	су		
ADOPTING AGENCY	HCD DSA			SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 630—ELECTRIC WELDERS**

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official	State Agency  OSHPD *						
ADOPTING AGENCY	HCD DSA			SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 640—AUDIO SIGNAL PROCESSING, AMPLIFICATION, AND REPRODUCTION EQUIPMENT

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		ş	State	Agen	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENCI	1 2 AC		OI IVI	Dilo	SS	1	2	3	4	DOSH	ВОС	
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections												

# ARTICLE 640—AUDIO SIGNAL PROCESSING, AMPLIFICATION, AND REPRODUCTION EQUIPMENT

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State A	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDITING AGENCI	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Вос
which are listed below												

### ARTICLE 645—INFORMATION TECHNOLOGY EQUIPMENT

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 647—SENSITIVE ELECTRONIC EQUIPMENT

ENFORCING AUTHORITY	Local Building Official			Local Fire Official	Local Health Official		ş	State	Agen	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

**ARTICLE 650—PIPE ORGANS** 

Local Building Official		ding	Local Fire Official	Local Health Official			State	Ager	су		
H	1 20/1		SEM	DHG	DSA		OSF	IPD		*	BSC
1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
						Х	Χ	Х	Х		
	H(	Build Offi HCD	Building Official HCD DSA 1 2 AC	Building Fire Official  HCD DSA AC SFM	Building Fire Health Official  HCD DSA AC SFM DHS	Building Official Official Official  HCD DSA AC SFM DHS SS	Building Fire Health Official  HCD DSA AC SFM DHS DSA SS 1	Building Official         Fire Official         Health Official         State And Official           HCD DSA AC         SFM AC         DHS DSA SS         1 2           1 2 X X         X X         X	Building Official Official Official Official  HCD DSA AC SFM DHS DSA SS 1 2 3  V V V V	Building Official         Fire Official         Health Official         State Agency           HCD DSA AC         SFM         DHS         DSA SS         0SHPD           1 2 3 4         Y Y Y Y         Y Y Y Y	Building Official         Fire Official         Health Official         State Agency           HCD DSA AC         SFM         DHS         DSA SS         0SHPD         *           1 2 3 4 DOSH         Y Y Y Y         Y Y Y Y         Y Y Y Y

# 660—X-RAY EQUIPMENT

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency OSHPD			су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI W	Diio	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 665—INDUCTION AND DIELECTRIC HEATING EQUIPMENT

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		State Agency			су		
ADOPTING AGENCY	Η	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
1		2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections												

# ARTICLE 665—INDUCTION AND DIELECTRIC HEATING EQUIPMENT

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		S	State /	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI TINO AGENCI	1	2	AC	OI III	51.0	SS	1 2 3 4		4	DOSH		
which are listed below												

### ARTICLE 668—ELECTROLYTIC CELLS

	Build	ding	Local Fire Official	Local Health Official		State Agency					
-		DSA			DSA		OSH	IPD		*	DCC
1	2	AC	SFIVI	סחט	SS	1	2	3	4	DOSH	BSC
						Х	Х	Х	Х		
	H 1	Build Offi HCD 1 2	1 2 AC	Building Fire Official  HCD DSA 1 2 AC SFM	Building Fire Health Official  HCD DSA AC SFM DHS	Building Fire Health Official  HCD DSA AC SFM DHS SS	Building Fire Health Official  HCD DSA AC SFM DHS DSA SS 1	Building Fire Health Official  HCD DSA AC SFM DHS DSA SS 1 2	Building Official         Fire Official         Health Official         State Ager           HCD DSA 1 2 AC         SFM DHS         DSA SS         1 2 3           1 2 X X X X         Y X X X	Building Official         Fire Official         Health Official         State Agency           HCD DSA 1 2 AC         SFM DHS         DSA SS         1 2 3 4           1 2 X X X X X         Y X X X X	Building

# **ARTICLE 669—ELECTROPLATING**

				WALL GOO	LLLO II (OI L)							
ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State /	Agen	су		
ADOPTING AGENCY	Н	ICD DSA SFIN		SEM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

**ARTICLE 670—INDUSTRIAL MACHINERY** 

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 675—ELECTRICALLY DRIVEN OR CONTROLLED IRRIGATION MACHINES

Local Building Official			Local Fire Official	Local Health Official		Ş	State	Ager	су		
Н	100		SEM	DHG	DSA		OSH	PD		*	BSC
1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
						Х	Х	Х	Х		
	H 1	Build Offi HCD	Building Official HCD DSA 1 2 AC	Building Fire Official HCD DSA AC SFM	Building Fire Health Official  HCD DSA AC SFM DHS	Building Official Official Official  HCD DSA AC SFM DHS SS	Building Fire Health Official  HCD DSA AC SFM DHS DSA SS 1	Building Fire Health Official  HCD DSA AC SFM DHS DSA SS 1 2	Building Fire Official Official Official  HCD DSA AC SFM DHS DSA SS 1 2 3	Building	Building Official         Fire Official         Health Official         State Agency           HCD DSA 1 2 AC         SFM DHS         DSA SS         1 2 3 4 DOSH           1 2 X Y Y Y Y         Y Y Y Y Y

# ARTICLE 680—SWIMMING POOLS, FOUNTAINS, AND SIMILAR INSTALLATIONS

ARTICLE	OOU	<u> </u>	V V IIVIIVIII	NG POOLS, FO	JUNIAINS, AN	D SIIVIILAK II	NOTAL	LLAII	CINO			
ENFORCING AUTHORITY		Buile	cal ding cial	Local Fire Official	Local Health Official	State Agency				су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	Х	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)							X	X		X		
Adopt only those sections which are listed below												

# ARTICLE 680—SWIMMING POOLS, FOUNTAINS, AND SIMILAR INSTALLATIONS

ENFORCIN AUTHORIT	_		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State A	Ager	су		
ADOPTING AG	ENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOI TING AG	LING	1	2	AC	OI IVI	Diio	SS	1 2 3 4		4	DOSH	Вос	
<del>680-62(g)(1)</del>	CA							X	XX		X		

# ARTICLE 685—INTEGRATED ELECTRICAL SYSTEMS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		\$	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Diio	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE 690—SOLAR PHOTOVOLTAIC SYSTEMS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		Ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

**ARTICLE 692—FUEL CELL SYSTEMS** 

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State /	Agen	су		
ADOPTING AGENCY	Н	ICD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# **ARTICLE 695—FIRE PUMPS**

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		\$	State	Ager	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 700—EMERGENCY SYSTEMS

ENFORCING AUTHORITY		Offi	cal ding cial	Local Fire Official	Local Health Official			State /		су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADDI III O AGENOT	1	2	AC	OI III	51.0	SS	1	2	3	4	DOSH	
Adopts entire NEC article without amendments												
Adopt entire NEC article as amended (amendments listed below)							X	Х	Х	Х		
Adopt only those sections which are listed below												
700.12 <del>(b)</del> (B)(2) CA excep. 1, 2, & 3							X	Χ	X	Х		

### ARTICLE 701—LEGALLY REQUIRED STANDBY SYSTEMS

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official			State .		су	*	
ADOPTING AGENCY	п	DSA AC	DSA	SFM	DHS	DSA		USF	טפו	ı		BSC
ADOFTING AGENCT	' I I I - I	SFIVI	DHS	SS	1	2	3	4	DOS H	ВЗС		
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 702—OPTIONAL STANDBY SYSTEMS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SEM	חחפ	DSA		OSH	IPD		*	BSC
ADOPTING AGENCY	1	2	AC	SFM DHS		SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 705—INTERCONNECTED ELECTRIC POWER PRODUCTION SOURCES

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### ARTICLE 720—CIRCUITS AND EQUIPMENT OPERATING AT LESS THAN 50 VOLTS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State /	Ager	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 725—CLASS 1, CLASS 2 AND CLASS 3 REMOTE-CONTROL, SIGNALING, AND POWER-LIMITED CIRCUITS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State /	Agen	су		
ADOPTING AGENCY	Н	HCD DSA		SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 727—INSTRUMENTATION TRAY CABLE: TYPE ITC

ENFORCING AUTHORITY	Local Building Official HCD DSA			Local Fire Official	Local Health Official		ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOF TING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 760—FIRE ALARM SYSTEMS

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 770—OPTICAL FIBER CABLES AND RACEWAYS

	lding icial	Fire Official	Local Health Official		8	State	Agen	су		
HCD	DSA	SEM	DHG	DSA		OSH	IPD		*	BSC
2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
					Х	Χ	Х	Х		
	Off HCD	Official HCD DSA	Official Official HCD DSA SFM	Official Official Official HCD DSA SFM DHS	Official Official Official HCD DSA SFM DHS DSA	Official Official Official HCD DSA AC SFM DHS DSA SS 1	Official Official Official  HCD DSA AC SFM DHS DSA SS 1 2	Official         Official         Official           HCD         DSA         DSA         OSHPD           2         AC         SFM         DHS         SS         1         2         3	Official         Official         Official           HCD         DSA         DHS         DSA         OSHPD           2         AC         SFM         DHS         SS         1         2         3         4	Official         Official         Official           HCD         DSA         DHS         DSA         OSHPD         *           2         AC         SFM         DHS         SS         1         2         3         4         DOSH

# ARTICLE 780—CLOSED-LOOP AND PROGRAMMED POWER DISTRIBUTION

ENFORCING AUTHORITY	Local Building Official		ding	Local Fire Official	Local Health Official		,	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM DHS		DSA	DSA OSHPD				*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DIIG	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

### **ARTICLE 800—COMMUNICATIONS CIRCUITS**

ENFORCING AUTHORITY	Local Building Official		ding	Local Fire Official	Local Health Official		Ş	State /	Ager	су		
ADOPTING AGENCY	Н	HCD DSA		SFM DHS		DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 810—RADIO AND TELEVISION EQUIPMENT

ENFORCING AUTHORITY			cal ding cial	Local Fire Official	Local Health Official		5	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SEM	SFM DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

# ARTICLE 820—COMMUNITY ANTENNA TELEVISION AND RADIO DISTRIBUTION SYSTEMS

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		ş	State .	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSHPD				BSC
ADDI TINO AGENCI	1	2	AC	OI IVI	Bilo	SS	1	2	3	4	DOSH	Вос
Adopts entire NEC article without amendments							Х	Χ	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections												

# ARTICLE 820—COMMUNITY ANTENNA TELEVISION AND RADIO DISTRIBUTION SYSTEMS

ENFORCING AUTHORITY		Loc Build Offi	ding	Local Fire Official	Local Health Official		Ş	State	Agen	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSHPD			*	BSC
ADDITING AGENCT	1	2	AC	OI W	Dilo	SS	1	2	3	4	DOSH	Вос
which are listed below												

# ARTICLE 830—NETWORK-POWERED BROADBAND COMMUNICATION SYSTEMS

ENFORCING AUTHORITY	Local Building Official		Building Fi Official Offi		Local Local Fire Health Official Official		State Agency						
ADOPTING AGENCY	Н	HCD DSA		SFM DHS		DSA	OSHPD				*	BSC	
ADOF TING AGENCT	1	2	AC	OI IVI	Dilo	SS	1	2	3	4	DOSH	ВЗС	
Adopts entire NEC article without amendments							Х	Х	Х	Х			
Adopt entire NEC article as amended (amendments listed below)													
Adopt only those sections which are listed below													

# **CHAPTER 9—TABLES**

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		Si	tate A	gen	су		
ADOPTING AGENCY	Н	HCD DSA		SFM DHS		DSA	OSHPD				*	BSC
ADDI TINO AGENOT	1	2	AC	OI III	Dilo	SS	1	2	3	4	DOSH	500
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

APPENDIXES ANNEXES A, B, C

Local Building Official		ding	Local Fire Official	Local Health Official		State Agency							
H	CD	DSA	SEM	SFM DHS	DSA	OSHPD				*	BSC		
1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС		
						Х	Х	Х	Х				
		Build Offi HCD	Building Official HCD DSA	Building Fire Official Official HCD DSA SFM	Building Fire Health Official Official HCD DSA SFM DHS	Building Fire Health Official Official HCD DSA SFM DHS DSA	Building Official Official Official  HCD DSA 1 2 AC SFM DHS DSA SS 1	Building Official Fire Official Official  HCD DSA 1 2 AC SFM DHS DSA SS 1 2	Building Official Fire Official Official  HCD DSA 1 2 AC SFM DHS DSA SS 1 2 3	Building Official         Fire Official         Health Official         State Agency           HCD DSA 1 2 AC         SFM DHS         DSA SS 1 2 3 4	Building Official         Fire Official         Health Official         State Agency           HCD DSA 1 2 AC         SFM DHS         DSA SS         0SHPD *           1 2 AC         DSA SS         1 2 3 4 DOSH		

**APPENDIXES** ANNEXES D, E AND F

ENFORCING AUTHORITY		Local Building Official		Local Fire Official	Local Health Official		ş	State	Ager	су		
ADOPTING AGENCY	Н	CD	DSA	SFM	DHS	DSA		OSH	IPD		*	BSC
ADOFTING AGENCT	1	2	AC	SFIVI	DHS	SS	1	2	3	4	DOSH	ВЗС
Adopts entire NEC article without amendments							Х	Х	Х	Х		
Adopt entire NEC article as amended (amendments listed below)												
Adopt only those sections which are listed below												

(END OF ITEM)

# **EXPRESS TERMS**

Adopt Chapter 1 through Chapter 9 of the 2002 NEC:

(NEC standards adopted by the Commission are applicable to all occupancies in California.)

### **MATRIX ADOPTION TABLE**

Adopting Agency	BSC	REMARKS
Adopt entire 2002 NEC Chapter 1 through 9 without amendments	X	No new amendments are being proposed by BSC during this 2002 annual adoption cycle.
Adopt Entire 2002 NEC Chapter 1 through 9 as amended1 2 3 (amended articles listed below)		
Adopt Only those articles of the 2002 NEC which are listed below and/or Adopt Only those California promulgated articles 1,2,3 listed below		

Authority: Health & Safety Code Sections 18928 and

18934.5

Reference(s): Health & Safety Code Sections 18928,

18928.1 and 18934.5

(END OF ITEM)

<sup>1</sup> New Amendments are shown underlined with "CA"

<sup>2</sup> Existing amendments of the 2001 California Electrical

Code being repealed are shown stricken with "CA"

<sup>3</sup> Existing amendments being continued from 2001 CEC into the 2004 CEC are shown italicized with "CA"

ITEM 10 HCD 1/02 Part 3

Article 89, Article 90, Chapter 1, 2, 3, 4, 5, 6, 7 and 9

### **EXPRESS TERMS**

#### **ARTICLE 80 - Administration and Enforcement**

The Department is proposing to not adopt Article 80 of the 2002 NEC. The Department id proposing to bring forward from the 2001 CEC an existing California Amendment, Article 89 - Administration, which provides rules for the public and local enforcement agencies in California which is consistent with state law.

#### **ARTICLE 89 - Administration**

The Department is proposing the adoption of only those sections within Article 89 indicated below and on the attached matrix table. The numbers of each section and all references to these numbers within each section, have been reformatted to coincide with the change in the numbering format of the 2002 NEC. Article 89 is an existing California amendment, which provides the purpose, scope, administrative authority, and application.

**089-1.** 89.1 Title. The provisions contained in this Code shall be known as the "California Electrical Code," a portion of the "California Building Standards Code," as defined in the "California Building Standards Law" commencing with Section 18901 of the Health and Safety Code, and may be cited and referred to as the "California Electrical Code." The unqualified words "This Code" as used herein, refer only to the California Electrical Code, and do not include any other portions of the California Building Standards Code. These provisions may also be cited as "C.E.C." or "Part 3" within other parts of the California Building Standards Code (Title 24).

**089-2** <u>89.2</u> **Purpose.** The purpose of this Code is to provide minimum standards to safeguard life or limb, health, property and public welfare, and to protect against hazards that may arise from the use of electricity by regulating and controlling the design, construction, installation, quality of materials, location and operation of electrical equipment, wiring and systems.

**089-3. 89.3 Scope.** The provisions of this Code and the building standards contained herein, including those standards adopted by reference without amendments, where specifically adopted by the listed agencies under their cited authority and enforced by the enforcing agency specified in Section <del>089-8</del> 89.7, shall apply to the construction, alteration, moving, demolition, repair

and use of all electrical equipment, wiring and systems in or on any building or structure or outdoors on any premise or property; except such electrical equipment, wiring and systems which are expressly exempted by Section 989-4 89.4.

Exception: [For HCD 1] Additions, Alterations, Repairs and Moved Buildings. Notwithstanding other provisions of law, alterations, repairs, replacements, and moved buildings are governed by Health and Safety Code, Division 13, Part 1.5, Sections 17912, 17920.3, 17922 (c), 17922.3, 17958.8 and 17958.9, known as the State Housing Law and are implemented by the California Code of Regulations, Title 25, Chapter 1.—Subchapter 1. Health and Safety Code sections 17958.8 and 17958.9 are repeated here for clarity and reads as follows:

(a) Section. 17958.8. "Local ordinances or regulations governing alterations and repair of existing buildings shall permit the replacement, retention, and extension of original materials and the use of original methods of construction as long as the hotel, lodging house, motel, apartment house, or dwelling, or portions thereof, or building and structure accessory thereto, complies with the provisions published in the State California Building Standards Code and the other rules and regulations of the department or alternative local standards adopted pursuant to Section 17920.7 13143.2 and does not become or continue to be a substandard building."

(b) Section. 17958.9. "Local ordinances or regulations governing the moving of apartment houses and dwellings shall, after July 1, 1978, permit the retention of existing materials and methods of construction so long as the apartment house or dwelling complies with the building standards for foundation applicable to new construction, and does not become or continue to be a substandard building."

**089-4. 89.4 Exempted from this Code.** This Code does not cover:

(a) (A) Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, manufactured homes, mobile homes, and recreational vehicles.

(b) (B) Installations underground in mines, mine shafts and tunnels.

(e) (C) Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.

(d) (D) Installation of communication equipment under the exclusive control of communication utilities, located

outdoors or in building spaces used exclusively for such installations.

(e) (E) Installations under the exclusive control of electrical utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.

Exception to (d) (D) and (e) (E): In places of employment, the following shall apply: installations of conductors, equipment and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated and maintained by an electric, communications or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.

(f) (F) Installations on highways or bridges.

# <del>089-5.</del> <u>89.5</u> Non-Building Standards, Orders and Regulations.

(a) (A) Requirements contained in the National Electrical Code (NEC), or in any other referenced code, document, or standard, which are not building standards as defined in Section 18912 18909 of the Health and Safety Code, shall not be construed as a part of the provisions of this Code.

(b) (B) For the applicability of regulations, safety and other orders, and standards which relate to the administration, enforcement, maintenance, operation and similar non-building standards, see other titles of the California Code of Regulations.

#### 089-6. 89.6 Order of Precedence and Use.

(a) (A) In the event of any difference between the provisions of this Code and the National Electrical Code (NEC), or between this Code and the provisions of any other referenced code, document or standard, the text of this Code shall govern. Where a specific provision varies from a general provision, the specific provisions shall apply.

(b) (B) If a section of this Code makes a cross-reference to another section or table in the National Electrical Code (NEC), such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code or for the particular enforcing agency.

(e) (C) If a section in the National Electrical Code (NEC) makes a cross-reference to another section or table in the NEC, such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code for the particular enforcing agency.

(d) (D) When adopted by a State agency, and approved by the Commission, the text of amended provisions contained in this Code shall take precedence over the corresponding provisions of the National Electrical Code (NEC).

**089.6.1 89.6.1 [For HCD 1] Local Variances.** For clarification purposes, the applicable Health & Safety Code Section 17958.5 is repeated here and reads as follows;

Section 17958.5. "Except as provided in Section 17922.6, in adopting the ordinances or regulations pursuant to Section 17958, a city or county may make such changes or modifications in the requirements contained in the provisions published in the California Building Standards Code and the other regulations adopted pursuant to Section 17922 as it determines, pursuant to the provisions of Section 17958.7, are reasonably necessary because of local climatic, geological, or topographical conditions."

"For purposes of this subdivision, a city and county may make reasonably necessary modifications to the requirements, adopted pursuant to Section 17922, contained in the provisions of the code and regulations on the basis of local conditions."

089.6.2 89.6.2 [For HCD 1] Findings, Filing and Rejections of Local Variances. For clarification purposes, the applicable subsection of Health & Safety Code Section 17958.7 is repeated here and reads as follows:

#### Section 17958.7

(a) "Except as provided in Section 17922.6, the governing body of a city or county, before making any modifications or changes pursuant to Section 17958.5, shall make an express finding that such modifications or changes are reasonably necessary because of local climatic, geological or topographical conditions. Such a finding shall be available as a public record. A copy of those findings, together with the modification or change expressly marked and identified to which each finding refers, shall be filed with the California Building Standards Commission. No modification or change shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission."

**(b)** "The California Building Standards Commission may reject a modification or change filed by the governing body of a city or county if no finding was submitted."

### 089-7. 89.7 Application.

# **3.** <u>(C)</u> HCD 1? Department of Housing and Community Development.

# 3A. (1) HCD 1? Department of Housing and Community Development.

Application - Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing and factory-built housing, and any other types of dwellings containing sleeping accommodations with common toilet or cooking facilities. Reference 089-7.8 89.7.8 of this code, Office of the State Fire Marshall, SFM for fire and panic safety application.

Enforcing Agency---Local Building Department or the Department of Housing and Community Development.

Authority Cited? Health and Safety Code sections

17921, 17922 and 19990.

Reference? Health and Safety Code sections 17000 through 17060, 17910 through 17990, and 19960 through 19997.

# 3B. (2) HCD 1/AC? Department of Housing and Community Development, Access Compliance.

Application? Covered Mmultifamily dwellings units, including but not limited to, lodging houses, dormitories, time-share dwellings, condominiums, shelters for homeless persons, congregate residences, apartment houses, dwellings, employee housing, factory-built housing, and any other types of dwellings containing sleeping accommodations with common toilet or cooking facilities which are not subject to DSA/AC requirements.

HCD 1/AC? (Department of Housing and Community Development, Access Compliance).

Application? Whenever the identification "HCD 1/AC" appears in this code, it shall mean the following provision by the California Department of Housing and Community Development requires specific accommodations for persons with physical disabilities, as defined in Chapter 11A, of the California Code of Regulations, Title 24, Part 2, also known as the California Building Code. The application of such provisions shall apply only to Group R Occupancies which are newly constructed covered multifamily dwellings structures (as defined in Chapter 2 11A of the California Building Code), including but not limited to, the following:

- 1. Apartment Buildings with 3 or more dwelling units.
- 2. Condominiums with 4 or more dwelling units.
- 3. Lodging Houses, as defined in Chapter 2 of the California Building Code, when used as a residence with 3 or more guest rooms.
- 4. Congregate Residences, as defined in Chapter 2 of the California Building Code.
- 5. Dwellings with 3 or more efficiency units, as defined in Chapter 2 of the California Building Code or Section 17958.1 of the California Health and Safety Code.
- 6. Shelters for the homeless, not otherwise subject to the disabled access provisions of the Division of the State Architect, Access Compliance (DSA/AC).
- 7. Dormitories, as defined in Chapter 2 of the California Building Code, with 3 or more guest rooms as defined in Chapter 2 of the California Building Code.
- 8. Time-share dwellings with 3 or more units, except for condominiums covered in item 2 above.
- 9. Other Group R Occupancies in covered multifamily dwellings which are regulated by the Office of the State Fire Marshal.

Buildings or portions of buildings of the same or similar occupancies, or mixed occupancies, and buildings accessory thereto, may also be subject to the disabled access provisions adopted by DSA/AC. Buildings subject to the disabled access regulations of the DSA/AC are identified in section 089-7.5 89.7.5 of this Code.

These multifamily structure disabled access regulations do not apply to the alteration, repair, rehabilitation, or additions to existing Group R Occupancies that were constructed and occupied prior to July 15, 1992. These regulations also generally do not cover public accommodations such as hotels and motels. (See Section 89.7.5 for public accommodations).

Note: For specific requirements and Eexceptions, see Chapters 10, and 11A, and 30,as amended, of the California Building Code; Articles Sections 210-7 (g)-(g.1), 324.4 Exceptions 1-6 and 380-8 (c) - (c.1), 404.8(C), and 406.3(G) as amended. of this part, and Part 5, Chapter 15, as amended, California Plumbing Code, Title 24, California Code of Regulations. (This regulation is effective on an emergency basis July 15, 1992).

Enforcing Agency---Local Building Department or the Department of Housing and Community Development.

Authority Cited? Health and Safety Code sections

17921, 17922, 19990 and Government Code Section

12955.1.

Reference? Health and Safety Code sections 17000 through 17060, 17910 through 17990, 19960 through 19997 and Government Code Section 12955.1.

# 3.1 (3) General ? State Housing Law; City or County Enforcement.

Notwithstanding other provisions of law, Health and Safety Code, Division 13, Parts 1.5, Section 17960 is repeated here for clarity and specificity and reads as follows:

<u>Section</u> 17960. "The building department of every city or county shall enforce within its jurisdiction all the provisions published in the State Building Standards Code, the provisions of this part, and the other rules and regulations promulgated pursuant to the provisions of this part pertaining to the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartment houses, hotels, or dwellings."

### 3.2 (4) Right of Entry For Enforcement.

Notwithstanding other provisions of law, Health and Safety Code Sections 17050(i), 17970, 17971, 17972 are repeated here for clarity and read as follows:

- (a) Section 17050 (i). "The enforcement agency may:
  - (1). Enter public or private properties to determine whether there exists any employee housing to which this part applies.
  - (2). Enter and inspect all employee housing wheresoever situated, and inspect all accommodations, equipment, or paraphernalia connected therewith.
  - (3). Enter and inspect the land adjacent to the employee housing to determine whether the sanitary and other requirements of this part, the building standards published in the California Building Standards Code relating to employee housing, and the other rules and regulations adopted pursuant to this part have been or are being complied with."
- (b) Section 17970. "Any officer, employee, or agent of an enforcement agency may enter and inspect any building or premises whenever necessary to secure compliance with, or prevent a violation of, any provision of this part, the building standards published in the State Building Standards Code, and other rules and regulations promulgated pursuant to the provisions of this part which the enforcement agency has the power to enforce."
- (e) <u>Section</u> 17971. "The owner, or authorized agent of any owner, of any building or premises may enter the building or premises whenever necessary to carry out any instructions, or perform any work required to be done pursuant to this part, the building standards published in the State Building Standards Code, and other rules and

- regulations promulgated pursuant to the provisions of this part."
- (d) Section 17972. "No person authorized by this article to enter buildings shall enter any dwelling between the hours of 6 o'clock p.m. of any day and 8 o'clock a.m. of the succeeding day, without the consent of the owner or of the occupants of the dwelling, nor enter any dwelling in the absence of the occupants without a proper written order executed and issued by a court having jurisdiction to issue the order."

### 3.3 (5) Unsafe Buildings or Structures.

#### 3.3.1 (a) Authority to Enforce.

Notwithstanding other provisions of law, for administration, enforcement, actions, proceedings, abatement, violations and penalties in structures subject to State Housing Law, refer to California Health and Safety Code, Division 13, Part 1.5, Sections 17910 through 17995.5 and California Code of Regulations, Title 25, Division 1, Chapter 1- Subchapter 1.

### 3.3.2 (b) Employee housing.

Notwithstanding other provisions of law, for administration, enforcement, actions, proceedings, violations and penalties applicable to structures subject to the Employee Housing Act, refer to Health and Safety Code, Division 13, Part 1, Sections 17000 through 17062.5 and California Code of Regulations, Title 25, Division 1, Chapter 1- Subchapter 1.

### 3.4 (6) Violations.

### 3.4.1 (a) Actions and Proceedings.

Notwithstanding other provisions of law, Health and Safety Code, Division 13, Part 1.5, Sections 17980 through 17995.5 address punishments, penalties and fines for violations of building standards in structures subject to State Housing Law and California Code of Regulations, Title 25, Division 1, Chapter 1- Subchapter 1.

# 3.4.2 (b) Actions and Proceedings. (For Employee Housing).

Notwithstanding other provisions of law, and Health and Safety Code, Division 13, Part 1, Sections 17055 through 17062.5 address punishments, penalties and fines for violations of building standards in structures subject to the Employee Housing Act and California Code of Regulations, Title 25, Division 1, Chapter 1. Subchapter 1.

### 3.5 (7) Methods for Approval of Alternates.

# 3.5.1 (a) Alternate for Materials, Designs, Tests and Methods of Construction.

Notwithstanding other provisions of law, the method for approval of alternate materials, design, tests and

methods of construction are set forth in State Housing Law, Health and Safety Code, Division 13, Part 1.5, Section 17923, or 17951(d), or 17958 and California Code of Regulations, Title 25, Division 1, Chapter 1-Subchapter 1.

# 3.5.2 (b) Alternate for Materials, Designs, Tests and Methods of Construction. (For Employee Housing)

Notwithstanding other provisions of law, the method for approval of alternate materials, appliances, installation, device, arrangement, or method of construction are set forth in the Employee Housing Act, Health and Safety Code, Division 13, Part 1, Section 17002 and California Code of Regulations, Title 25, Division 1, Chapter 1. Subchapter 1.

#### 3.6 (8) Fees and Plan Review.

### 3.6.1 (a) General.

Notwithstanding other provisions of law, reference State Housing Law, Health and Safety Code, Division 13, Part 1.5, Section 17951 and California Code of Regulations, Title 25, Division 1, Chapter 1 <u>Subchapter 1</u> for local enforcement agency's authority to prescribe fees.

### 3.6.2 (b) Plan Review and Time Limitations.

Notwithstanding other provisions of law, provisions related to plan checking, prohibition of excessive delays and contracting with or employment of private parties to perform plan checking are set forth in State Housing Law, Health and Safety Code, Division 13, Part 1.5, Section 17960.1, and for Employee Housing Act, Health and Safety Code, Division 13, Part 1, Sections 17021 and 17055

### 3.6.3 (c) Retention of Plans.

**Note:** Reference <u>Building Standards Law</u>, Health and Safety Code, <u>Division 13</u>, <u>Part 3</u>, Sections 19850 and 19851 for provisions related to permanent retention of plans.

**Enforcing Agency---**Local Building Department or the Department of Housing and Community Development. **Authority Cited?** Health and Safety Code sections 17921and 50558.

**Reference?** Health and Safety Code sections 17000 through 17060, 17910 through 17990, 19960 through 19997, 50558 and 50559.

# 4. <u>(D)</u> HCD-2—Department of Housing and Community Development

Application--- Permanent buildings <u>and permanent</u> <u>accessory buildings or structures constructed within in</u> mobile home parks, recreational vehicle parks, temporary recreational parks, travel trailer parks, campgrounds and special occupancy parks <u>which are under the control and ownership of the park operator.</u>

# **4.1** (1) Right of Entry For Enforcement. [For HCD 2]. Notwithstanding other provisions of law, Health and

Safety Code, Division 13, Part 2.1, Section 18400 is repeated below for clarity.

#### Section 18400

- "(a) The department shall enforce this part and the rules and regulations adopted pursuant to this part, except as provided in Section 18300.
- (b) The officers or agents of the enforcement agency may do either of the following:
  (1) Enter public or private property to determine whether there exists any park to which this part applies.
  - (2) Enter and inspect all parks, wherever situated, and inspect all accommodations, equipment, or paraphernalia used in connection therewith, including the right to examine any registers of occupants maintained therein in order to secure the enforcement of this part and the regulations adopted pursuant to this part."

# 4.2 (2) Actions and Proceedings. [For HCD 2]. Notwithstanding other provisions of law, Health and Safety Code. Division 13. Part 2.1. Sections 18402.

Safety Code, Division 13, Part 2.1, Sections 18402, 18404, 18423, 18510 and 18700 address punishments, penalties and fines for violations of building standards subject to the Mobilehome Parks Act.

# 4.3 (3) Alternate for Materials, Designs, Tests and Methods of Construction. [For HCD 2].

Notwithstanding other provisions of law, the method for approval of alternate materials, appliances, installation, device, arrangement, or method of construction are set forth in the Mobilehome Parks Act, Health and Safety Code, Division 13, Part 2.1, Section 18305.

**Enforcing Agency**—Local building department or the Department of Housing and Community Development. **Authority Cited--**-Health and Safety Code Section 18300, 18610 and 18670

Reference Cited—Health and Safety Code Section 18200 through 18851

089-8. 89.8 Adopting Agency. An "Adopting agency" is a State agency, excluding an agency in the judicial or legislative department of the State Government, which is responsible for the administration of a program and which as promulgated, adopted and submitted to the Commission for its approval proposed building standards for such programs. "Adopting agency" may include boards, commissions, committees, departments, divisions, officers, and other subdivisions of State Government.

89-9. 89.9. Format. The California Electrical Code, a part of the California Building Standards Code, adopts the National Electrical Code (NEC) by reference on an article-by-article basis. Amendments or additions to the provisions of the NEC by each adopting agency are adopted on a section by section or subsection by

subsection basis, and follow the NEC format using the same titles, bold face headings and general text arrangement, except where the commission has approved a format variance.

**89-10. 89.10. Validity.** If any chapter, article, section, subsection, paragraph, sentence, clause, or phrase of this Code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the State as stipulated by statutes, or otherwise inoperative, such decisions shall not affect the validity of the remaining portions of this Code.

### 89-11. 89.11. Standard Reference Documents.

(a) (A) The codes, publications, and standards adopted in the Matrix Adoption or referred to in this Code, including other codes, publications, and standards referred to therein, are by title and date of publication, hereby adopted as standard reference documents of this code.

(b) (B) Such reference to other documents shall be made in the form of either an Internal citation within the text or a fine print note (utilizing a smaller typographical alphabet letter size), and shall be a specific edition of the referenced document. Internal citations appearing within the text of a building standard are enforceable, and each citation must be checked for accuracy and application. Fine print notes which appear beneath the applicable text of the building standard or Code section are explanatory of permissive and are not enforceable.

#### **ARTICLE 90 - Introduction**

The Department is proposing the adoption of Article 90 without amendment.

#### **CHAPTER 1: General, Articles 100-110**

The Department is proposing the adoption of Articles 100 and 110 of Chapter 1 without amendments.

### **CHAPTER 2: Wiring and Protection, Articles 200-285**

The Department is proposing the adoption of Articles 200, 210, 215, 220, 225, 230, 240, 250, 280, and 285 of Chapter 2 without amendments.

### **ARTICLE 210 Branch Circuits**

Note: In the 2002 Edition of the NEC, Section 210-7 was revised and relocated to Section 406.3. California Amendment Section 210-7(g) has been renumbered and relocated with modifications to Section 406.3(G)(1).

# 210-7(g) [HCD 1/AC w/exceptions] - Installation Heights.

Where access for people with physical disabilities is required by Article 089-7, the center of receptacle outlets on branch circuits of 30 amperes or less shall be installed not more than 48 inches nor less than 15 inches (381 mm) above the floor or working platform.

- Exception No. 1: Receptacle outlets installed as part of permanently installed baseboard heaters are exempt.
- Exception No. 2: Required receptacle outlets shall be permitted in floors when adjacent to sliding panels or walls.
- Exception No. 3: Baseboard electrical outlets used in relocatable partitions, window walls or other electrical convenience floor outlets are not subject to the minimum height requirements.
- Exception No. 4: This section shall not apply to existing buildings when the enforcing agency determines that compliance with these standards would create an unreasonable hardship.

Note: In the 2002 Edition of the NEC, Section 210-7 was revised and relocated to Section 406.3. California Amendment Section 210-7(g.1) has been renumbered and relocated with modifications to Section 406.3(G)(2).

### 210-7(g.1) [HCD 1/AC]

When access for persons with physical disabilities is required in covered multifamily dwelling units, the center of receptacle outlets on branch circuit of 30 amperes or less shall be located no higher than 48 inches, and no lower than 15 inches, above the floor. If the reach is over an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches in depth, the maximum height is reduced to 44 inches for forward approach, or 46 inches for side approach, provided the obstruction is no more than 24 inches in depth. Obstructions shall not extend more than 25 inches from the wall beneath the receptacle.

Outlets that do not satisfy these specifications are acceptable provided that comparable outlets, that perform the same functions, are provided within the same area and are accessible.

# CHAPTER 3: Wiring Methods and Materials, Articles 300-398

The Department is proposing the adoption of Articles

300, 310, 312, 314, 320, 322, 324, 328, 330, 332, 336, 338, 340, 342, 344, 348, 350, 352, 354, 356, 358, 360, 362, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 396, and 398 of Chapter 3 without amendments.

The Department is proposing the adoption of Articles 334 and 395, of Chapter 3 with amendments.

The Department is proposing to continue the non-adoption of Integrated Gas Spacer Cable, Article 326 of the 2002 NEC.

Note: In the 2002 Edition of the NEC, Article 324 has been revised and relocated to Article 394. California Amendment Section 324-4 has been relocated with modifications to Section 394.12.

#### 324-4. [HCD 1] - Uses not Permitted.

Concealed [HCD 1]knob-and-tube wiring shall not be used in commercial garages, theaters and similar locations, motion picture studios, hazardous (classified) locations or in the hollow spaces of walls, ceilings and attics when such spaces are insulated by loose, rolled, or foamed-in-place insulating material that envelopes the conductors.

**EXCEPTION:** This article is not intended to prohibit the installation of insulation where knob-and-tube wiring is present, provided the following are complied with:

The wiring shall be surveyed by an electrical contractor licensed by the State of California. Certification shall be provided by the electrical contractor that the existing wiring is in good condition with no evidence of deterioration or improper over-current protection, and has no improper connections or splices. Repairs, alterations or extensions to the electrical system will require permits and inspections by the authority having jurisdiction for the enforcement of this code. The certification form shall be filed with the authority

The certification form shall be filed with the authority having jurisdiction for the enforcement of this code and a copy furnished to the property owner.

(1)All accessible areas in the building where insulation has been installed around knob-and-tube wiring shall be posted by the insulation contractor with a notice, clearly visible, stating that caution is required when entering these areas. The notice shall be printed in both English and Spanish.

- (2) The insulation shall be noncombustible as defined by Section 215.2N of Part 2 of this Title.
- (3)The insulation shall not have any electrical conductive material as part of or supporting the insulation material.
- (4)Nothing in this exception will prohibit the authority having jurisdiction for the enforcement of this code from requiring permits and inspections for the installation of thermal insulation.

# ARTICLE 334. Nonmetallic-Sheathed Cable: Types NM, NMC, and NMS

**334.10 Uses Permitted.** Type NM, Type NMC, and Type

NMS cables shall be permitted to be used in the following:

- (1) One- and two-family dwellings.
- (2) Multifamily dwellings permitted to be of Types III, IV, and V construction except as prohibited in 334.12.
- (3) Other structures permitted to be of Types III, IV, and V construction except as prohibited in 334.12. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

Note: [HCD 1 and HCD 2] Types III, IV, and V construction as referenced in Section 334.10 items (2) and (3) shall be as defined in Title 24, Part 2, California Building Code.

FPN No. 1: Building constructions are defined in NFPA 220-1999, Standard on Types of Building Construction, or the applicable building code, or both.

FPN No. 2: See Annex E for determination of building types [NFPA 220, Table 3-1].

(4) Cable trays, where the cables are identified for the use.

FPN: See 310.10 for temperature limitation of conductors.

- (A) Type NM. Type NM cable shall be permitted as follows:
- (1) For both exposed and concealed work in normally dry locations except as prohibited in 334.10(3).
- (2) To be installed or fished in air voids in masonry block or tile walls
- **(B) Type NMC.** Type NMC cable shall be permitted as follows:
- (1) For both exposed and concealed work in dry, moist, damp, or corrosive locations, except as prohibited in 334.10(3)
- (2) In outside and inside walls of masonry block or tile
- (3) In a shallow chase in masonry, concrete, or adobe protected against nails or screws by a steel plate at least 1.59 mm (1.16 in.) thick and covered with plaster,

adobe, or similar finish

- **(C) Type NMS.** Type NMS cable shall be permitted as follows:
- (1) For both exposed and concealed work in normally dry locations except as prohibited in 334.10(3)
- (2) To be installed or fished in air voids in masonry block or tile walls
- (3) To be used as permitted in Article 780

Note: In the 2002 Edition of the NEC, Article 380 was revised and relocated to Article 404. California Amendment Section 380-8(C) has been renumbered and relocated with modifications to Section 404.8(C)(1).

#### 380-8 ( c ) [ HCD 1/AC] - Installation

Where access for people with disabilities is required by Article 089-7, the center of the grip of the operating handle of controls or switches intended to be used by the occupant of the room or area to control lighting and receptacle outlets, appliances or cooling, heating and ventilating equipment, shall be not more than 48 inches (1219 mm) above the floor or working platform.

Note: Section 380-8(c.1) has been renumbered and relocated with modifications to Section 404.8(C)(2).

#### 380-8(c.1) [ HCD 1/AC]

When access for people with physical disabilities is required in covered multifamily dwelling units, light switches, thermostats and other environmental controls shall be located no higher than 48 inches (1219 mm). and no lower than 15 inches (381 mm), above the floor. If the reach is over an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach, provided the obstruction is no more than 24 inches (610 mm) in depth. Obstructions shall not extend more than 25 inches (635 mm) from the wall beneath a control. Controls that do not satisfy these specifications are acceptable provided that comparable controls or outlets, that perform the same functions, are provided within the same area and are accessible.

**ARTICLE 394 Concealed Knob-and-Tube Wiring** 

**394.12 Uses Not Permitted.** Concealed knob-and-tube wiring shall not be used in the following:

- (1) Commercial garages
- (2) Theaters and similar locations
- (3) Motion picture studios
- (4) Hazardous (classified) locations
- (5) Hollow spaces of walls, ceilings, and attics where such spaces are insulated by loose, rolled, or foamed-in-place insulating material that envelopes the conductors.

**EXCEPTION:** [For HCD 1] This article is not intended to prohibit the installation of insulation where knob-and-tube wiring is present, provided the following are complied with:

- (1) The wiring shall be surveyed by an electrical contractor licensed by the State of California. Certification shall be provided by the electrical contractor that the existing wiring is in good condition with no evidence of deterioration or improper over-current protection, and no improper connections or splices. Repairs, alterations, or extensions to the electrical system will require permits and inspections by the authority having jurisdiction for the enforcement of this code.
- (2) The certification form shall be filed with the authority having jurisdiction for the enforcement of this code, and a copy furnished to the property owner.
- (3) All accessible areas in the building where insulation has been installed around knoband-tube wiring shall be posted by the insulation contractor with a notice, clearly visible, stating that caution is required when entering these areas. The notice shall be printed in both English and Spanish.
- (4) The insulation shall be noncombustible as defined by Section 215.2N of Part 2 of this Title. in Title 24, Part 2, California Building Code.
- (5) The insulation shall not have any electrical conductive material as part of or supporting the insulation material.
- (6) Nothing in this exception will prohibit the authority having jurisdiction for the enforcement of this code from requiring permits and inspections for the installations of thermal insulation.

# CHAPTER 4: Equipment for General Use, Articles 400-490.

The Department is proposing the adoption of Articles 400, 402, 408, 410, 411, 422, 424, 426, 427, 430, 440,

445, 450, 455, 460, 470, 480, and 490 of Chapter 4 without amendments.

The Department is proposing the adoption of Articles 404 and 406, of Chapter 4 with amendments.

#### **ARTICLE 404 Switches**

<del>380-8(c) and 380-8(c.1)</del> 404.8(<u>C</u>) [HCD 1/AC] – Installation <u>Height</u>

### (C) [For HCD 1/AC] Installation Height.

(1) [For HCD 1/AC] Where access for people with physical disabilities is required by Article 89-7 89.7, the center of the grip of the operating handle of controls or switches intended to be used by the occupant of the room or area to control lighting and receptacle outlets, appliances or cooling, heating and ventilating equipment, shall be not more than 48 inches (1219 mm) above the finished floor or working platform.

(2) [For HCD 1/AC] When access for people with physical disabilities is required in covered multifamily dwellings, units, light switches, thermostats and other environmental controls shall be located no higher than 48 inches (1219 mm), and no lower than 15 inches (381 mm), above the finished floor measured to the center of the grip. If the reach is over an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches (508 and 635 mm) in depth, the maximum height is reduced to 44 inches (1118 mm) for forward approach, or 46 inches (1168 mm) for side approach, provided the obstruction is no more than 24 inches (610 mm) in depth. Obstructions shall not extend more than 25 inches (635 mm) from the wall beneath a control. Controls that do not satisfy these specifications are acceptable provided that comparable controls or outlets, that perform the same functions, are provided within the same area and are accessible.

# ARTICLE 406 Receptacles, Chord Connectors, and Attachment Plugs (Caps)

**406.3 General Installation Requirements.** Receptacle outlets shall be located in branch circuits in accordance with Part III of Article 210. General installation requirements shall be in accordance with 406.3(A) through (F). **[For HCD 1/AC]** General installation requirements shall be in accordance with 406.3(A) through (G).

 $\frac{210-7(g)}{100}$  and  $\frac{210-7(g.1)}{100}$  406.3 $\frac{(G)}{100}$  [HCD 1/AC] – Installation Heights.

### 406.3(G) [HCD 1/AC] - Installation Heights.

(1) [HCD 1/AC w/exceptions 1, 2, and 3] Where access for people with physical disabilities is required by Article 89-7 89.7, the center of receptacle outlets on branch circuits of 30 amperes or less shall be installed in an outlet

<u>box located</u> not more than 48 inches (1219 mm) <u>measured from the top of the receptacle outlet box</u> nor less than 15 inches (381 mm) <u>measured from the bottom of the receptacle outlet box</u> above the <u>finished</u> floor or working platform.

**Exception No. 1:** Receptacle outlets installed as part of permanently installed baseboard heaters are exempt.

**Exception No. 2:** Required receptacle outlets shall be permitted in floors when adjacent to sliding panels or walls.

**Exception No. 3:** Baseboard electrical outlets used in relocatable partitions, window walls or other electrical convenience floor outlets are not subject to the minimum height requirements.

**Exception No. 4:** This section shall not apply to existing buildings when the enforcing agency determines that compliance with these standards would create an unreasonable hardship.

(2) [For HCD 1/AC] When access for persons with physical disabilities is required in covered multifamily dwellings, units, the center of receptacle outlets on branch circuits of 30 amperes or less shall be located in an outlet box located no more than 48 inches (1219 mm) measured from the top of the receptacle outlet box nor less than 15 inches (381 mm) measured from the bottom of the receptacle outlet box above the finished floor or working platform. If the reach is over an obstruction (for example, a kitchen base cabinet) between 20 and 25 inches in depth, the maximum height measured at top of the box is reduced to 44 inches for forward approach, or 46 inches for side approach, provided the obstruction is no more than 24 inches in depth. Obstructions shall not extend more than 25 inches from the wall beneath the receptacle.

Outlets that do not satisfy these specifications are acceptable provided that comparable outlets, that perform the same functions, are provided within the same area and are accessible.

#### CHAPTER 5: Special Occupancies, Articles 500-555.

The Department is proposing the adoption of Articles 518, 527, and 545, of Chapter 5 without amendments.

The Department is proposing to not adopt Articles 500, 501, 502, 503, 504, 505, 510, 511, 513, 514, 515, 516, 517, 520, 525, 530, 540, 547, 550, 551, 552, 553, and 555 of the 2002 NEC.

CHAPTER 6: Special Equipment, Articles 600-695.

The Department is proposing the adoption of Articles 600, 620, 680, 690, and 692 of Chapter 6 without amendments.

The Department is proposing to not adopt Articles 604, 605, 610, 630, 640, 645, 647, 650, 660, 665, 668, 669,

670, 675, 685, and 695 of the 2002 NEC.

The Department is proposing the adoption of Article 625 as amended by the State Fire Marshal.

### CHAPTER 7: Special Conditions, Articles 700-780.

The Department is proposing the adoption of Articles 700, 702, 705, 720, 725, 727, and 770 of Chapter 7 without amendments.

The Department is proposing to not adopt Articles 701, 760, and 780.

# CHAPTER 8: Communications Systems, Articles 800-830.

[NOTE: SEE PAGE XXVII "SUMMARY OF BSC ACTION" REGARDING ADOPTION OF CHAPTER 8 BY THE HOUSING AND COMMUNITY DEVELOPMENT AGENCY].

#### **CHAPTER 9: Tables**

The Department is proposing the adoption of the Tables 1, 4, 5, 5A, 8, and 9, 11(A), 11(B), 12(A), and 11(B) in Chapter 9 without amendments.

### **ANNEXES**

The Department is proposing to not adopt Annexes A, B, C, D, E, and F.

\* \* \*
(END OF ITEM)

ITEM 11

SFM 1/02

Part 3, Articles 89, Chapters 1, 2, 3, 4, 6, & 7

### **EXPRESS TERMS**

#### **ARTICLE 89 - Administration**

{The SFM is proposing to continue the adoption by reference of various sections of the State Article 89 as indicated below. (See also the Matrix Adoption Tables.)

The model code publisher has changed the numbering format of the 2002 Edition of the NEC. Therefore the SFM's Notice package containing the Initial Statement of Reasons and the Express Terms reflects said format change.

**089-1.** <u>89.1</u> <u>Title.</u> The provisions contained in this Code shall be known as the "California Electrical Code," a portion of the "California Building Standards Code," as defined in the "California Building Standards Law" commencing with Section 18901 of the Health and Safety Code, and may be cited and referred to as the "California Electrical Code." The unqualified words "This Code" as used herein, refer only to the California Electrical Code, and do not include any other portions of the California Building Standards Code. These provisions may also be cited as "C.E.C." or "Part 3" within other parts of the California Building Standards Code (Title 24).

**089-2** <u>89.2</u> **Purpose.** The purpose of this Code is to provide minimum standards to safeguard life or limb, health, property and public welfare, and to protect against hazards that may arise from the use of electricity by regulating and controlling the design, construction, installation, quality of materials, location and operation of electrical equipment, wiring and systems.

**089-3. 89.3 Scope.** The provisions of this Code and the building standards contained herein, including those standards adopted by reference without amendments, where specifically adopted by the listed agencies under their cited authority and enforced by the enforcing agency specified in Section <del>089-8</del> <u>89.7</u>, shall apply to the construction, alteration, moving, demolition, repair and use of all electrical equipment, wiring and systems in or on any building or structure or outdoors on any premise or property; except such electrical equipment, wiring and systems which are expressly exempted by Section <del>089-4</del> 89.4.

# **089-4. 89.4 Exempted from this Code.** This Code does not cover:

(a) (A) Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobilehomes, and recreational vehicles.

- (b) (B) Installations underground in mines, mine shafts and tunnels.
- (c) (C) Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
- (d) (D) Installation of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.
- (e) (E) Installations under the exclusive control of electrical utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.

Exception to (d) (D) and (e) (E): In places of employment, the following shall apply: installations of conductors, equipment and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated and maintained by an electric, communications or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.

(f) (F) Installations on highways or bridges.

# 089-5. 89.5 Non-Building Standards, Orders and Regulations.

- (a) (A) Requirements contained in the National Electrical Code (NEC), or in any other referenced code, document, or standard, which are not building standards as defined in Section 18912 18909 of the Health and Safety Code, shall not be construed as a part of the provisions of this Code.
- (b) (B) For the applicability of regulations, safety and other orders, and standards, which relate to the administration, enforcement, maintenance, operation and similar non-building standards, see other titles of the California Code of Regulations.

#### 089-6. 89.6 Order of Precedence and Use.

(a) (A) In the event of any difference between the provisions of this Code and the National Electrical Code (NEC), or between this Code and the provisions of any other referenced code, document or standard, the text of this Code shall govern. Where a specific provision varies

from a general provision, the specific provisions shall apply.

(b) (B) If a section of this Code makes a cross-reference to another section or table in the National Electrical Code (NEC), such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code or for the particular enforcing agency.

(e) (C) If a section in the National Electrical Code (NEC) makes a cross-reference to another section or table in the NEC, such cross-referencing shall be interpreted to mean that which is shown in the NEC unless the referenced section or table has been amended or modified in this Code for the particular enforcing agency.

(d) (D) When adopted by a State agency, and approved by the Commission, the text of amended provisions contained in this Code shall take precedence over the corresponding provisions of the National Electrical Code (NEC).

<del>089-7.</del> <u>89.7.</u> Application.

#### 8. H. SFM – Office of the State Fire Marshal

Application-All high-rise buildings; assembly, educational, and institutional buildings; all other occupancies when auxiliary or accessory to an assembly, educational, or institutional building; organized camps and State-owned or occupied buildings including State colleges and universities; tents, awnings, or other fabric enclosures used in connection with any occupancy.

Enforcing Agency-Local fire authority. State Fire Marshal where no local fire authority exists and for State-owned or occupied buildings.

Authority Cited-Health and Safety Code Sections 13108, 131116, 13143, 13143.6, 13211 and 18897.3.

Reference-Health and Safety Code Sections 13100 through 13146.5, 13210 through 13216, and 18897 through 18897.7.

Application - Any building or structure used or intended for use as an asylum, jail, mental hospital, hospital, sanitarium, home for the aged, children's nursery, children's home, school or any similar occupancy of any capacity.

Any theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.

Authority Cited-Health and Safety Code Section 13143.

Reference-Health and Safety Code Section 13143.

### Small Family Day-care Homes

<u>Authority Cited-Health and Safety Code Sections 1597.45, 1597.54, 13143 and 17921.</u>

Reference-Health and Safety Code Section 13143.

### Large Family Day-care Homes

<u>Authority Cited-Health and Safety Code Sections 1597.46, 1597.54 and 17921.</u>

Reference-Health and Safety Code Section 13143.

### Residential Facilities and Residential Facilities for the Elderly

Authority Cited-Health and Safety Code Section 13113 and 13131.5

Reference-Health and Safety Code Section 13143.

# Any state institution or other state-owned or state-occupied building.

<u>Authority Cited-Health and Safety Code Section 13108.</u> <u>Reference-Health and Safety Code Section 13143.</u>

#### **High-rise Structures**

Authority Cited-Health and Safety Code Section 13211. Reference-Health and Safety Code Section 13143.

### **Motion Picture Production Studios**

<u>Authority Cited-Health and Safety Code Section 13143.1.</u> Reference-Health and Safety Code Section 13143.

# Any state institution or other state-owned or state-occupied building.

<u>Authority Cited-Health and Safety Code Section 13108.</u> <u>Reference-Health and Safety Code Section 13143.</u>

### High-rise Structures

Authority Cited-Health and Safety Code Section 13211. Reference-Health and Safety Code Section 13143.

#### **Motion Picture Production Studios**

<u>Authority Cited-Health and Safety Code Section 13143.1.</u> <u>Reference-Health and Safety Code Section 13143.</u>

### Organized Camps

<u>Authority Cited-Health and Safety Code Section 18897.3.</u> <u>Reference-Health and Safety Code Section 13143.</u>

All hotels, motels, lodging houses, apartment houses and dwellings, including congregate residences and buildings and structures accessory thereto.

Multiple-story structures existing on January 1, 1975, let for human habitation, including and limited to, hotels, motels, apartment houses, less than 75 feet (22 860 mm) above the lowest floor level having building access, wherein rooms used for sleeping are let above the ground floor. Authority Cited-Health and Safety Code Sections 13143.2

#### and 17921.

Reference-Health and Safety Code Section 13143.

Certified family-care homes, out-of-home placement facilities, halfway houses, drug and/or alcohol rehabilitation facilities and any building or structure used or intended for use as a home or institution for the housing of any person of any age when such person is referred to or placed within such home or institution for protective social care and supervision services by any governmental agency.

<u>Authority Cited-Health and Safety Code Section 13143</u> and 13143.6.

Reference-Health and Safety Code Section 13143.6.

# <u>Tents, awnings or other fabric enclosures used in connection with any occupancy.</u>

Authority Cited-Health and Safety Code Section 13116. Reference-Health and Safety Code Section 13116.

# <u>Fire alarm devices, equipment and systems, in connection with any occupancy.</u>

Authority Cited-Health and Safety Code Sections 13114 and 13143.

Reference-Health and Safety Code Section 13114.

### Hazardous materials.

<u>Authority Cited-Health and Safety Code Sections 13143.9.</u> <u>Reference-Health and Safety Code Section 13143.9.</u>

#### Flammable and combustible liquids.

<u>Authority Cited-Health and Safety Code Sections 13143.6.</u> <u>Reference-Health and Safety Code Section 13143.6.</u>

**089-8. 89.8 Adopting Agency.** An "Adopting agency" is a State agency, excluding an agency in the judicial or legislative department of the State Government, which is responsible for the administration of a program and which as promulgated, adopted and submitted to the Commission for its approval proposed building standards for such programs. "Adopting agency" may include boards, commissions, committees, departments, divisions, officers, and other subdivisions of State Government.

89-9. 89.9. Format. The California Electrical Code, a part of the California Building Standards Code, adopts the National Electrical Code (NEC) by reference on an article-by-article basis. Amendments or additions to the provisions of the NEC by each adopting agency are adopted on a section by section or subsection by subsection basis, and follow the NEC format using the same titles, bold face headings and general text arrangement, except where the commission has approved a format variance.

**89-10. 89.10. Validity.** If any chapter, article, section, subsection, paragraph, sentence, clause, or phrase of this

Code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the State as stipulated by statutes, or otherwise inoperative, such decisions shall not affect the validity of the remaining portions of this Code.

### 89-12. 89.11. Standard Reference Documents.

(A) (A) The codes, publications, and standards adopted in the Matrix Adoption or referred to in this Code, including other codes, publications, and standards referred to therein, are by title and date of publication, hereby adopted as standard reference documents of this code.

(b) (B) Such reference to other documents shall be made in the form of either an Internal citation within the text or a fine print note (utilizing a smaller typographical alphabet letter size), and shall be a specific edition of the referenced document. Internal citations appearing within the text of a building standard are enforceable, and each citation must be checked for accuracy and application. Fine print notes, which appear beneath the applicable text of the building standard or Code section are explanatory of permissive and are not enforceable.

### CHAPTER 1: General - Articles 100 and 110

The SFM is proposing the adoption by reference the entire Article 100 – Definitions without SFM amendments.

The SFM is proposing the adoption by reference the entire Article 110-Requirements for Electrical Installations without SFM amendments.

# CHAPTER 2: Wiring and Protection - Articles 225 and 250

The SFM is proposing the adoption by reference of only those sections listed below from Article 225-Article Outside Branch Circuits and Feeders, without SFM amendments.

### 225-19 (e) 225.19 (E) Zone for Fire Ladders.

The SFM is proposing the adoption by reference of only those sections listed below from Article 250-Grounding, without SFM amendments.

250-110(i) 250.112(I) Power-Limited Remote-Control, Signaling, and Fire Alarm Circuits.

# CHAPTER 3: Wiring Methods and Materials, Articles 300, 314, 320, 330, 332, 334, and 362

The SFM is proposing the adoption by reference of only those sections listed below from Article 300-Wiring Methods, without SFM amendments.

300-21 300.21 Spread of Fire or Products of Combustion.

300-22 300.22 Wiring in Ducts, Plenums, and Other Air-Handling Spaces.

{The model code publisher of the 2001 California Electrical Code (CEC) has located the provisions of Article 370 into Article 314 of the 2002 NEC. The SFM is proposing to continue the adoption of this section as shown below.}

The SFM is proposing the adoption by reference of only those sections listed below from Article 314-Outlet, Device, Pull and Junction Boxes, Conduit Bodies and Fittings, without SFM amendments.

# 370-15 314.15 Damp, Wet, or Hazardous (Classified Locations).

{The model code publisher of the 2001 California Electrical Code (CEC) has located the provisions of Article 333 into Article 320 of the 2002 NEC. The SFM is proposing to continue the adoption of this section as shown below.}

The SFM is proposing the adoption by reference of only those sections listed below from Article 320-Armored Cable: Type AC, without SFM amendments.

### 333-1 320.2 Definition.

{The model code publisher of the 2001 California Electrical Code (CEC) has located the provisions of Article 334 into Article 330 of the 2002 NEC. The SFM is proposing to continue the adoption of this section as shown below.}

The SFM is proposing the adoption by reference of only those sections listed below from Article 330-Metal-Clad Cable: Type MC, without SFM amendments.

334-1 330.2 Definition. 334-3 330.10 Uses Permitted. 334-4 330.12 Uses Not Permitted. {The model code publisher of the 2001 California Electrical Code (CEC) has located the provisions of Article 330 into Article 332 of the 2002 NEC. The SFM is proposing to continue the adoption of this section as shown below.}

The SFM is proposing the adoption by reference of only those sections listed below from Article 332-Mineral-Insulated, Metal-Sheathed Cable: Type MI, without SFM amendments.

330-4 332.2 Definition. 330-3 332.10 Uses Permitted. 330-4 332.12 Uses Not Permitted.

{The model code publisher of the 2001 California Electrical Code (CEC) has located the provisions of Article 336 into Article 334 of the 2002 NEC. The SFM is proposing to continue the adoption of this section as shown below.}

The SFM is proposing the adoption by reference of only those sections listed below from Article 334-Nonmetallic Sheathed Cable Types NM, NMC, and NMS, without SFM amendments.

336-4(a) 334.10-(A) Type NM. 336-4(b) 334.10-(B) Type NMC. 336-5 334.12 Uses Not Permitted

{The model code publisher of the 2001 California Electrical Code (CEC) has located the provisions of Article 331 into Article 362 of the 2002 NEC. The SFM is proposing to continue the adoption of this section as shown below.}

The SFM is proposing the adoption by reference of only those sections listed below from Article 362-Electrical Nonmetallic Tubing, without SFM amendments.

331-1 362.2 Definition. 331-3 362.10 Uses Permitted. 331-4 362.12 Uses Not Permitted.

# CHAPTER 4: Equipment for General Use, Articles 400, 410, 422, and 450.

The SFM is proposing the adoption by reference of only those sections listed below from Article 400-Fexible Cords and Cables, without SFM amendments.

400-6 400.6 Markings. 400-7 400.7 Uses Permitted. 400-8 400.8 Uses Not Permitted. 400-9 400.9 Splices. 400-10 400.10 Pull at Joints and Terminals. 400-12 400.12 Minimum Size. 400-13 400.13 Overcurrent Protection.

400-14 400.14 Protection from Damage.

400-30 400.30 Scope.

400-31 400.31 Construction.

400-32 400.32 Shielding.

400-33 400.33 Grounding.

400-34 400.34 Minimum Bending Radii.

400-35 400.35 Fittings.

400-36 400.36 Splices and Terminations.

The SFM is proposing the adoption by reference of only those sections listed below from Article 410-Lighting Fixtures, Lamp holders, Lamps, and Receptacles, without SFM amendments.

410-5 410.5 Fixtures Near Combustible Material.

410-6 410.6 Fixtures Over Combustible Material.

410-8(d) 410.8(D) Location.

410-12 410.12 Outlet Boxes to Be Covered.

410-13 410.13 Covering of Combustible Material at Outlet Boxes.

410-86 410.86(C) Adjacent to Combustible Materials.

The SFM is proposing the adoption by reference of only those sections listed below from Article 422-Appliances without SFM amendments.

422-10 422.10 Branch-Circuit Rating.

422-11 422.11 Overcurrent Protection.

422-12 422.12 Central Heating Equipment.

422-8(a), (b), (c) NEC 422.16 Flexible Cords.

The SFM is proposing the adoption by reference of only those sections listed below from Article 450-Transformes and Transformer Vaults (Including Secondary Ties) without SFM amendments.

450-13 450.13 Accessibility.

450-21 450.21 Dry-Type Transformers Installed Indoors.

450-23 450.23 Less-Flammable Liquid-Insulated Transformers.

4<del>50-24</del> 4<u>50.24</u> Nonflammable Fluid Insulated Transformers.

450-26 450.26 Oil-Insulated Transformers Installed Indoors.

450-27 450.27 Oil-Insulated Transformers Installed Outdoors.

450-41 450.41 Location.

450-48 450.48 Storage in Vaults.

CHAPTER 5: SPECIAL OCCUPANCIES, Articles 500, 501, 502, 503 and 527.

The SFM is proposing the adoption by reference the entire Article 500-Hazardous (Classified) Locations, Classes I, II, and III, Divisions 1 and 2 without SFM amendments.

The SFM is proposing the adoption by reference the entire

Article 501-Class I Locations without SFM amendments.

The SFM is proposing the adoption by reference the entire Article 502-Class II Locations without SFM amendments.

The SFM is proposing the adoption by reference the entire Article 503-Class III Locations without SFM amendments.

{The model code publisher of the 2001 California Electrical Code (CEC) has located the provisions of Article 305 into Article 527 of the 2002 NEC. The SFM is proposing to continue the adoption and amendments of this section as shown below.}

The SFM is proposing the adoption by reference of entire Article 527-Temporary Wiring, as amended. The SFM is also proposing to maintain the existing SFM amendments of the 2001 CEC Section 305-3(c) into Section 527.3(C) of the 2004 CEC as shown below.

**305-3(c) 527.3 (C) Emergencies and Tests.** Temporary electrical power and lighting installations shall be permitted during emergencies and for tests, experiments, and developmental work. *[For SFM]* as approved by the authority having jurisdiction.

### **CHAPTER 6: SPECIAL EQUIPMENT, Article 625**

The SFM is proposing the adoption by reference of the entire Article 625-Electric Vehicle Charging System Equipment as amended. The SFM is also proposing to maintain the existing SFM amendments of the 2001 CEC Section 625-29(d) into Section 625.12(D) of the 2004 CEC as shown below.

625-29(d) 625.29(D) Ventilation Required. Where the electric vehicle supply equipment listed or labeled as suitable for charging electric vehicles that require ventilation for indoor charging and marked in accordance with Section 625(C), mechanical ventilation, such as fan, shall be provided, as specified in the California Building Code. (Note that the remaining provisions of NEC Section 625.29 are not adopted in the State of California.) The ventilation shall include both supply and exhaust equipment and shall be permanently installed and located to intake from, and vent directly to, the outdoors. Positive pressure ventilation systems shall be permitted only in buildings or areas that have been specifically designed and approved for that application. Mechanical ventilation requirements shall be determined by one of the methods specified in 625.29(D)(1) through (D)(4).

CHAPTER 7: SPECIAL CONDITIONS, Articles 700, 701, 702, 725, and 760.

The SFM is proposing the adoption by reference of the

entire Article 700-Emergency Systems. The SFM is also proposing to maintain the existing SFM amendments of the 2001 CEC Section 700-12(b)(2) into Section 700.12(B)(2) of the 2004 CEC as shown below.

700-12(b)(2) 700.12(B)(2) Generator Set. Where internal combustion engines are used as the prime mover, an onsite fuel supply shall be provided with an on-premise fuel supply sufficient for not less than 2 hours full-demanded operation of the system. Where power is needed for the operation of the fuel transfer pumps to deliver fuel to a generator set day tank, this pump shall be connected to the emergency power system.

## [Exceptions for SFM, OSHPD 1, 2, 3, & 4]

Exception No.1: The on-premise fuel supply shall be sufficient for not less than 24 hours full-demand operation in acute general care hospitals and correctional treatment centers that provide optional services. For acute care hospital facilities required to meet NPC-5, the on-premise fuel supply shall be sufficient for no less than 72 hours full-demand operations.

**Exception No. 2:** The on-premise fuel supply shall be sufficient for not less than 6 hours full-demand operation in the following health facilities of seven or more beds: correctional treatment centers that provide only basic services, acute psychiatric hospitals, intermediate care facilities, and skilled nursing facilities.

<u>Exception No. 3:</u> The on-premise fuel supply shall be sufficient for not less than 4 hours full-demand operation in ambulatory surgical clinics.

The SFM is proposing the adoption by reference the entire Article 701-Legally Required Standby Systems without SFM amendments.

The SFM is proposing the adoption by reference the entire Article 702-Optional Standby Systems without SFM amendments.

The SFM is proposing the adoption by reference the entire Article 725-Class 1, Class 2, and Class 3 Remote-Control, Signaling and Power-Limited Circuits without SFM amendments.

The SFM is proposing the adoption by reference the entire Article 760-Fire Alarm Systems. The SFM is also proposing to maintain the existing SFM amendments of the 2001 CEC Section 760-1.1 into Section 760.1.1 of the 2004 CEC as shown below.

## 760-1.1 760.1.1 [For SFM] Equipment and Systems.

Fire alarm equipment and systems required to be installed in any occupancy within the scope of these regulations shall conform to the applicable performance and construction standards specified in NFPA 72-1999.

## Part 4 California Mechanical Code

ITEM 12 OSHPD 2/02 Part 4 Section 203-A, 316.5, 407.2, 407.4, 410.0, 602.1, 1131.0 & Table 4-A

## **EXPRESS TERMS**

## **SUB-ITEM 12-1**

**CHAPTER 2 - DEFINITIONS** 

203 - A

AIR, OUTSIDE, is air from outside the building....

AIR, RELIEF [For OSHPD 1, 2, 3, & 4] is air being exhausted directly from a building or a return duct system which is not contaminated by odors or other contaminants and could otherwise be used as return air if not exhausted from the building.

AIR, RETURN, is air being recirculated....

### **Notation**

**Authority**: Health & Safety Code Sections 1226,1275,129790 and 129850 and Government Code

Section 11152.5

Reference: Health & Safety Code Section 129850

(END OF ITEM)

## SUB-ITEM 12-2

## **CHAPTER 3 – GENERAL REQUIREMENTS**

## SECTION 316.0 – ESSENTIAL MECHANICAL PROVISIONS [FOR OSHPD 1, 2 & 4]

During periods of power outages emergency electrical power shall be provided for the following equipment:

- **316.1** All heating equipment necessary to maintain a minimum temperature of 60°F (15.6°C) in patient areas which are not specified in Table 315.
- **316.2** All heating equipment necessary to maintain the minimum temperatures for sensitive areas as specified in Table 315.
- **316.3** Equipment necessary for humidification of the areas listed in Table 315.
- **316.4** All supply, return and exhaust fans required to maintain the positive and negative are balances as required in Table 4-A.

<u>316.5 All control components and control systems</u> necessary for the normal operation of equipment required to have emergency electrical power.

Notation

Authority: Health & Safety Code Sections

1226,1275,129790 and 129850 and Government Code

Section 11152.5

Reference: Health & Safety Code Section 129850

(END OF ITEM)

## **SUB-ITEM 12-3**

## **CHAPTER 4 – VENTILATION AIR SUPPLY**

#### 407.2 Outdoor air intakes and exhaust outlets.

407.2.1 Outdoor air intakes. Outdoor air intakes shall be located at least 25 feet (7.62 m) from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, cooling towers and areas that may collect vehicular exhaust or other noxious fumes. The bottom of outdoor air intakes shall be located as high as practicable, but not less than 10 feet (3048 mm), above ground level. If installed through above the roof, they shall be located 18 inches (457 mm) above roof level or 3 feet (914 mm) above a flat roof where heavy snowfall is anticipated.

. . . .

**407.2.2 Exhaust outlets.** Exhaust outlets shall be located a minimum of 10 feet (3048 mm) above adjoining grade and 10 feet (3048 mm) from doors, occupied areas and operable windows.

**Exception:** Negative-pressure isolation rooms shall comply with Section 414.1.

407.2.3 Relief Air Discharge. Building relief air discharge shall discharge at least 10 feet (3048 mm) from any outside air intake

#### Notation

**Authority**: Health & Safety Code Sections 1226,1275,129790 and 129850 and Government Code Section 11152.5

Reference: Health & Safety Code Section 129850

## **SUB-ITEM 12-4**

#### 407.4 Air circulation.

**407.4.1** Air shall be introduced at the cleanest areas and removed at the dirtiest areas in order to reduce changes chances of airborne cross infection as follows:

**407.4.1.1** Air supplied to ....

407.4.1.2 Room supply air outlets....

407.4.1.3 Corridors shall not be used to <u>convey</u> supply, <u>air to or return or exhaust air to or from any room. <del>oxcopt to ventilate small rooms [30 square feet (2.79 m²) or less] which are mechanically exhausted, such as bathrooms, toilet rooms and janitors' closets opening directly on corridors.</u></del>

**EXCEPTION 1**: Small rooms [30 square feet (2.79 m<sup>2</sup>) or less] which are mechanically exhausted, such as bathrooms, toilet rooms and janitors' closets opening directly on corridors.

<u>EXCEPTION 2: Air transfer caused by pressure</u> differentials in rooms required to have a positive or negative air balance by Table 4-A or Table 4-C.

**407.4.1.4** No space above a ceiling may be utilized as an outside-air, supply-air, exhaust-air or return-air plenum.

**EXCEPTION:** Designs specifically approved by the enforcing agency.

407.4.1.5 Air from a patient room, exam room, or treatment room shall not be transferred to another similar room without first having passed through air filters as required by Table 4-B.

**407.4.1.6** Supply outlets and return and exhaust air inlets shall be located to prevent short-circuiting.

### **Notation**

Authority: Health & Safety Code Sections

1226,1275,129790 and 129850 and Government Code

Section 11152.5

Reference: Health & Safety Code Section 129850

(END OF ITEM)

## **SUB-ITEM 12-5**

410.0 - LABORATORIES [FOR OSHPD 1, 2, 3, & 4]

**410.1** The minimum amount of outdoor air in laboratories shall be provided in accordance with Table 4-A. A filter with 90 percent average efficiency shall be installed in the air-supply system at its entrance to the

media transfer room.

410.2 Laboratory hoods for general use shall have a minimum average face velocity of 75 feet per minute (380 m/s). Hoods in which infectious or highly radioactive materials are processed shall have a face velocity of 100 feet per minute (510 m/s) and each shall have an independent exhaust system with the fan installed at the discharge point of the system. Bacteriological safety cabinets used for processing infectious materials shall have an average face velocity of 50 to 70 feet per minute (255 m/s to 355 m/s) and shall be equipped with a means for disinfect ion. 410.3 Laboratory hoods shall not be connected to the general building exhaust system. Hoods in which infectious, incompatible or highly radioactive materials are processed each shall have an independent exhaust system with the fan installed at the discharge point of the system. Duct systems serving fume laboratory hoods shall be constructed of stainless steel of a type which will resist corrosion by materials normally handled. Duct systems serving fume laboratory hoods used for purposes other than those needed for routine diagnostic laboratory procedures and in which highly radioactive materials or a significant volume of highly oxidizing agents are used shall be constructed of USS 18-8 stainless steel or the equivalent for a minimum distance of 10 feet (3048 mm) from the hood. Such ducts shall be equipped with wash down facilities and shall be consistent with fire safety requirements.

410.4 The exhaust from all laboratory hoods in which infectious or radioactive materials are processed shall be equipped with filters having a 99 percent efficiency based on the DOP (dioctyl phthalate) test method. Filter frames shall be durable and carefully dimensioned, and shall provide an airtight fit with the enclosing duct work. All joints between filter segments and the enclosing duct work shall be gasketed or sealed to provide a positive seal against air leakage.

## Notation

Authority: Health & Safety Code Sections

1226,1275,129790 and 129850 and Government Code

Section 11152.5

Reference: Health & Safety Code Section 129850

(END OF ITEM)

## **SUB-ITEM 12-6**

### **CHAPTER 6 – DUCT SYSTEMS**

**602.1 General.** Supply air, return air and outside air for heating, cooling or evaporative cooling systems shall be conducted through duct systems constructed of metal as set forth in Tables 6-1, 6-2 and 6-3 or metal ducts

complying with U.M.C. Standard No. 6-2 or the referenced HVAC Duct Construction Standard in Chapter 16, Part II with prior approval. Ducts, plenums and fittings may be constructed of asbestos cement, concrete, clay or ceramics when installed in the ground or in a concrete slab, provided the joints are tightly sealed.

Corridors shall not be used to convey air to or from rooms if the corridor is required to be of fire-resistive construction per the Building Code.

**Exception 1:** [For OSHPD 1, 2, 3 & 4] In health facilities, air from corridors may be used as makeup air to ventilate small rooms of 30 square feet (2.79 m²) or less which are mechanically exhausted, such as bathrooms, toilet rooms, janitor closets, and electrical or telephone closets opening directly onto corridors.

<u>Exception 2: [For OSHPD 1, 2, 3 & 4]</u> Air transfer caused by pressure differentials in rooms required to have a positive or negative air balance by Table 4-A.

Concealed building spaces....

#### **Notation**

Authority: Health & Safety Code Sections

1226,1275,129790 and 129850 and Government Code

Section 11152.5

Reference: Health & Safety Code Section 129850

(END OF ITEM)

#### **SUB-ITEM 12-7**

#### **CHAPTER 11 - REFRIGERATION**

1131.0 Location. Cooling towers, evaporative condensers and fluid coolers shall be located such that their plumes cannot enter occupied spaces. Plume discharges shall be at least five (5) feet (1524 mm) above or twenty (20) feet (6096 mm) away from any ventilation inlet to a building. Location on the property shall be as required for buildings by the Building Code. 1131.1 [For OSHPD 1, 2, 3 & 4] Plume discharge shall be at least twenty-five (25) feet (7620 mm) from any ventilation inlet to a building.

## Notation

**Authority**: Health & Safety Code Sections 1226,1275,129790 and 129850 and Government Code Section 11152.5

Reference: Health & Safety Code Section 129850

## **SUB-ITEM 12-8**

TABLE 4-A --PRESSURE RELATIONSHIP AND VENTILATION REQUIREMENTS FOR GENERAL ACUTE CARE HOSPITALS, SKILLED NURSING FACILITIES, INTERMEDIATE CARE FACILITIES, CORRECTIONAL TREATMENT CENTERS,

**OUTPATIENT FACILITIES AND LICENSED CLINICS** 

A	B	С	D	E	F
	AIR		CONDITION	ED AIR NOT	ALL AIR
	BALANCE	MINIMUM	100%	O.S.A.	EXHAUSTE
AREA DESIGNATION	RELATIONSH IP TO ADJACENT AREAS <sup>§</sup>	AIR CHANGES IF 100% O.S.A.	Minimum Air Changes of Outdoor Air per Hour	Minimum Total Air Changes per Hour	D DIRECTLY TO OUTDOORS
Operating room, cardiac cath lab and cystoscopy	P <sup>7</sup>	12	5	20	
Patient holding preparation <sup>1</sup>	Ε	6	2	6	
Delivery room	Р	12	5	20	
Nursery	Р	8	3	12	
Recovery	Е	6	2	6	Yes
Intensive/coronary care <sup>9</sup>	Р	6	2	6	
Emergency department: Waiting area Operating room Treatment room Trauma room <sup>3</sup>	N P E P	<del>10</del> <u>12</u> 12 6 12	2 5 2 5	40 <u>12</u> 20 6 20	Yes <sup>2</sup>   
Patient room	E	2	2	4 <u>6</u>	
Patient area corridor	E	2	2	, <u>s</u>	
Labor/delivery/recovery room	E	2	2	4 <u>6</u>	
Negative-pressure isolation room	N <sup>4</sup>	12	2	12	Yes
Negative-pressure isolation anteroom	P <sup>4</sup>	10	2	10	Yes
Positive-pressure isolation room	$P^5$	15	2	15	
Positive-pressure isolation anteroom	$N^6$	15	2	15	
Treatments, and examination rooms	Е	6	2	6	
Bronchoscopy and endoscopy	N	12	2	12	Yes
Special purpose room (SNF & ICF only)	Е	6	2	6	Yes
Imaging: X-ray (diagnostic and treatment) CT Scan MRI room Fluoroscopy room Dark room Negative-pressure x-ray room	E E E N N	6 6 6 6 12 12	2 2 2 2 2 2 2	6 6 6 12 12	  Yes Yes Yes
Gamma camera	Е	6	2	6	
Bedpan room	N			10	Yes
Bathroom	N	1		10	Yes
Janitors' closet	N	1		10	Yes
Sterilizer equipment room	N			10	Yes
Substerile room	Е	10	2	10	Yes

Linen and trash chute rooms	Ν			10	Yes
Food preparation centers	Е	10	2	10	Yes
Dining room	Е	10	2	10	
Dishwashing room	Ν	-1		10	Yes
Dietary day storage	Е	-		2	
Laundry, general (clean and dirty)	Е	10	2	10	Yes
Soiled linen sorting and storage	Ν			10	Yes
Clean linen storage	Р	2	2	2	
Anesthesia storage	Е	8		8	Yes
Central medical and surgical supply: Soiled or decontamination room Clean workroom	N P	4 4	2 2	4 4	Yes 
Unsterile supply	E	2	2	2	
Pharmacy/medicine room	Р	2	2	4	
Laboratory General Biochemistry Cytology Glass washing Histology Microbiology Nuclear medicine Pathology Serology Sterilizing Media transfer Infectious disease and virus Bacteriology Negative-pressure treatment/exam	N P N N N N P N P N N	6 6 10 6 6 6 6 10 4 6	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6 6 10 6 6 6 6 10 4 6	Yes
Physical therapy and hydrotherapy	N	6	2	6	
Soiled workroom (utility room)	N	4	2	10	Yes
Clean workroom	P	4	2	6	
Autopsy	N	12	2	12	Yes
Toilet room	N			10	Yes
Shower room	N			10	Yes
Waiting Area Primary care clinic	Ν	10	2	10	Yes <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>The pressure relationship of the entire emergency department shall be negative to other adjacent areas.

<sup>&</sup>lt;sup>2</sup>Air may be recirculated if a high-efficiency particulate air (HEPA) filter with a minimum efficiency of 99.97 percent is installed in the return air duct which serves the waiting area.

<sup>&</sup>lt;sup>3</sup>The term "trauma room" as used here is the operating room space in the emergency department or other trauma reception area that is used for emergency surgery. The first aid room and/or "emergency room" used for initial treatment of accident victims may be ventilated as noted for the "treatment rooms."

<sup>&</sup>lt;sup>4</sup>The anteroom shall have positive air pressure in relation to the negative-pressure isolation room. A door louver, transfer grille, or other acceptable means shall be provided to allow for airflow from the anteroom to the negative pressure isolation room. The negative-pressure isolation room shall have negative pressure in relation to the anteroom, and the adjoining toilet room shall have negative pressure in relation to the negative-pressure isolation room. Negative pressure shall be achieved by balancing the exhaust cfm to no less than 75 cfm (35.4 L/s) greater than the supply cfm. The overall area consisting of the anteroom, negative-pressure isolation room, and adjoining toilet room shall have an equal air pressure in relation to the corridor.

**EXCEPTION:** For correctional treatment centers, the location and design of the air transfer device shall not compromise the safety, security and protection of staff, inmates, and property.

<sup>5</sup>Positive-pressure shall be achieved by balancing the supply cfm to not less than 75 cfm (35.4 L/s) greater than the exhaust and return cfm.

<sup>6</sup>The anteroom shall have negative air pressure in relation to the positive-pressure isolation room. A door louver, transfer grille, or other acceptable means shall be provided to allow for airflow from the positive pressure isolation room to the anteroom. The positive-pressure isolation room shall have positive-pressure in relation to the anteroom and adjoining toilet room. Positive pressure shall be achieved by balancing the supply cfm to not less than 75 cfm (35.4 L/s) greater than the exhaust and return cfm. The overall area consisting of the anteroom, positive-pressure isolation room, and adjoining toilet room shall have an equal air pressure in relation to the corridor.

**EXCEPTION:** For correctional treatment centers, the location and design of the air transfer device shall not compromise the safety, security, and protection of staff, inmates, and property.

P = Positive E-Equal N=Negative

8. For operating rooms, cardiac catheterization labs, angiography rooms, cystoscopy rooms, delivery rooms, intensive care units, and nurseries provide approximately 15% excess supply air to the room or a sufficient quantity of excess supply air to maintain an appropriate positive air balance based on the room tightness and number of doors. For all rooms not listed in this footnote or not listed in Table 315 requiring either a positive or negative air balance, provide approximately 10% differential CFM between supply and return/exhaust airflow but not less than 25 CFM differential shall be provided regardless of room size. Room function, size, and tightness may be considered when determining the differential airflow required.

9 Intensive care patient rooms, which contain toilet or bedpan washing fixtures within the room, shall be provided with a minimum of 75 CFM of exhaust directly over the toilet or bedpan washing fixtures.

<sup>&</sup>lt;sup>7</sup>Cystoscopy may have equal air balance relationship to adjacent areas when approved by authority having jurisdiction.

## TITLE 24, PART 2, CALIFORNIA BUILDING CODE – EXPRESS TERMS for OSHPD 2/02

(The OSHPD is proposing the following amendments to the California Building Code (CBC) in response to comments received regarding this OSHPD 2/02 rulemaking. The following proposed modifications to the Office's originally proposed express terms relate to mechanical requirements in the CBC which conflict with requirements in the CMC.)

**1202.2.1 General.** [For OSHPD 1, 2, 3 & 4] for all patient care areas, refer to California Mechanical Code, Table 4-A. All enclosed portions of Groups A, B, E, F, H, I, M and S Occupancies customarily occupied by human beings shall be provided with natural ventilation by means of openable exterior openings with an area not less than 1/20 of the total floor area of shall be provided with a mechanically operated ventilation system. Such exterior openings shall open directly onto a public way or a yard or court as set forth in Section 1203.4. Such mechanically operated ventilation system shall be capable of supplying a minimum of 15 cubic feet per minute (7 L/s) of outside air per occupant in all portions of the building during such time as the building is occupied. If the velocity of the air at a register exceeds 10 feet per second (3 m/s), the register shall be placed more than 8 feet (2438 mm) above the floor directly beneath.

<u>[For OSHPD 1, 2, 3 & 4] for exhaust discharge locations, refer to California Mechanical Code, Section 407.2.2.</u> Toilet rooms shall be provided with a fully openable exterior window with an area not less than 3 square feet (0.279 m²), or a vertical duct not less than 100 square inches (64.516 mm²) in area for the first water closet plus 50 square inches (32.258 mm²) additional of area for each additional water closet, or a mechanically operated exhaust system capable of providing a complete change of air every 15 minutes. Such mechanically operated exhaust systems shall be connected directly to the outside, and the point of discharge shall be at least 3 feet (914 mm) from any opening that allows air entry into occupied portions of the building.

For ventilation of hazardous vapors or fumes in Group H Occupancies, see Sections 307.5.2 and 1202.2.3. For Group S, Division 3 Occupancies, see Section 1202.2.7.

## CALIFORNIA BUILDING CODE CHAPTER 12 ADOPTION MATRIX TABLE

CI	California Building Code hapter 12-Interior Environment					
	Comments OSI			OSHPD		
		1	2	3	4	
Adopt entire UBC chapter without amendments						
Adopt entire UBC chapter as amended (amended sections listed below)		X	<u>X</u>	<u>X</u>	<u>X</u>	
Adopt only those sections of						

UBC which are listed below and adopt only those California promulgated sections listed below.				
1202.2.1 CA	Χ	Χ	Χ	Χ

## **MATRIX TABLES**

	California Mechanical Code Chapter 2-Definitions								
	Comments		OSH	HPD					
		1	2	3	4				
Adopt entire UMC chapter without amendments									
Adopt entire UMC chapter as amended (amended sections listed below)		X	X	X	X				
Adopt only those sections of UMC which are listed below and adopt only those California promulgated sections listed below.									
203.0 CA	No change to the matrix is necessary. The proposed amendment to Section 203.0 does not change OSHPD's current adoption, as shown.	X	X	X	Х				
204.0 CA		Х	Х	Χ	Χ				
207.0 CA		Χ	Χ	Χ	Х				
210.0 CA		Χ	Χ	Χ	Χ				
217.0 CA		Χ	Χ	Х	Χ				

221.0 CA	Χ	Χ	Χ	Х
223.0 CA	Χ	Χ	Χ	Х

C	California Mechanical Code Chapter 3 – General Requirements							
	Comments	OSHPD						
		1	2	3	4			
Adopt entire UMC chapter without amendments								
Adopt entire UMC chapter as amended (amended sections listed below)		X	X	Х	X			
Adopt only those sections of UMC which are listed below and adopt only those California promulgated sections listed below.								
304.2 Exception 2 CA		Х	Х		Х			
313.0 CA		Х	Х		Χ			
314.1 CA		Х			Х			
314.2 CA			Х		Χ			
315.1 CA		Х			Χ			
315.2 CA			Х		Χ			
315.3 CA				Χ				
316.0 CA	No change to the matrix is necessary. The proposed amendment of subsection 316.5, will be adopted for OSHPD 1, 2 & 4 and falls within Section 316.0.	Х	Х		X			
Table 315 CA		Χ	Χ		Χ			

	lifornia Mechanical Code er 4 – Ventilation Air Supply				
	Comments		OSHPD		
		1	2	3	4
Adopt entire UMC chapter					

without amendments					
Adopt entire UMC		Χ	Χ	Χ	Χ
chapter as amended					
(amended sections listed					
below)					
Adopt only those sections					
of UMC which are listed					
below and adopt only					
those California					
promulgated sections					
listed below.					
401.0 CA		Χ	Χ	Χ	Χ
403.0 Exception CA		Χ	Χ	Χ	Χ
407.0	No change to the matrix is necessary. The	Χ	Х	Χ	Х
CA	proposed amendments, subsections				
	407.2.1, 407.2.3, 407.4.1, 407.1.3,				
	407.4.1.5 & 407.4.1.6 are within Section				
	407.0 and will be adopted for OSHPD 1,				
	2, 3 & 4, as shown.				
408.0 CA		Х	Х	Х	Х
409.0 CA		Χ	Х	Χ	Х
410.0	No change to the matrix is necessary. The	Χ	Х	Χ	Х
CA	proposed amendments to subsections				
	410.2 and 410.3 are within Section 410.0				
	and will be adopted for OSHPD 1, 2, 3 &				
	4, as shown.				
411.0 CA		Х	Х	Х	Х
412.0 CA		Χ	Χ	Χ	Χ
413.0 CA		Х	Χ	Χ	Х
414.0 CA		Χ	Χ	Χ	Χ
415.0 CA		Х	Х	Х	Х
416.0 CA		Χ	Χ	Χ	Х
416.3 CA					Х
417.0 CA		Χ	Х	Χ	Χ
418.0 CA		Χ	Χ	Χ	Х
Table 4-A	No change to the matrix is necessary. The	Х	Х	Х	Х
CA	new proposed amendments in Table 4-A				
	will not change OSHPD's adoption for				
	OSHPD 1, 2, 3 & 4, as shown.	_		_	
Table 4-B CA		Χ		Χ	
Table 4-C CA			Х		Χ

California Mechanical Code Chapter 6 – Duct Systems

	Comments		OSI	HPD	
		1	2	3	4
Adopt entire UMC chapter without amendments					
Adopt entire UMC chapter as amended (amended sections listed below)		X	X	X	X
Adopt only those sections of UMC which are listed below and adopt only those California promulgated sections listed below.					
602.1 Exceptions 1 & 2 CA	Proposed amendment to Section 602.1 adds a second exception to model code requirement.	Х	Х	Х	Х
602.3.1 CA		Χ	Χ	Χ	Χ
605.0 CA		Х	Χ	Χ	Χ
605.1 CA		Х	Х		Χ
605.2 CA		Х	Х		Χ
607.1.1CA		Χ	Χ		Χ

	California Mechanical Code Chapter 11 - Refrigeration				
	Comments	OSHPD			
		1	2	3	4
Adopt entire UMC chapter					
without amendments					
Adopt entire UMC		Х	Х	Х	Χ
chapter as amended					
(amended sections listed					
below)					
Adopt only those sections					
of UMC which are listed					
below and adopt only					
those California					
promulgated sections					
listed below.					
1107.5 CA		Х	Х	Х	Χ
<u>1131.1</u>	Section 1131.1 is a proposed new	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
CA	amendment.				

Table 11-1	Χ	Χ		Χ
Table 11-2 CA	Χ	Χ	Х	Χ

# Part 5 California Plumbing Code

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ITEM 13 OSHPD 1/02 Part 5 Section Table 4-2, 612.2, & 906.2

## **EXPRESS TERMS**

## SUB-ITEM 13-1 TABLE 4-2

Dectors' Dressing, General	Space	Lavatories <sup>2</sup>	Scrub Sinks²	Toilets	Tubs or Showers	Service Sinks²	Clinic Sinks <sup>4</sup>
Surgery and Delivery Suite	Doctors' Dressing, General			1			
Doctors' dressing	Nurses' Dressing, General	1 <sup>5</sup>		1			
Nurses' dressing	Surgery and Delivery Suite		2 <sup>6</sup>			1	
Clean-up rooms	Doctors' dressing			1	1 Shower		
Emergency Surgery,     1 Each'     1	Nurses' dressing	1 <sup>5</sup>		1	1 Shower		
Cystoscopy, Cath. Lab. and Special Procedure Room.         1           Anesthesia Workroom         1           Exam/Treatment Rooms         1           Nursing Service Space: Patient toilet and bath facilities 20         1.8 patients <sup>21</sup> Kitchen and Food Servicing Areas         1           Labor Rooms         1           Labor Rooms         1           Laundry, Soiled Sorting         1           Morgue         1           Negative-pressure Isolation Rooms <sup>10</sup> 2 <sup>10</sup> Nurses' Stations <sup>9</sup> 1           Physical Therapy         1           Positive-pressure Isolation Rooms <sup>9</sup> 1           Post anesthesia Recovery         1           Post anesthesia Recovery         1           Post anesthesia Recovery         1           Post anesthesia Recovery         1           Utility Room, Clean <sup>9</sup> 1           Utility Room, Soiled <sup>4</sup> 1           Nursery Exam/Workrooms         1           Intermediate Care         1:6           Bassinets         1           Intermediate Care Units <sup>11</sup> 1:6 Bassinets           Intermediate Care Units <sup>12</sup> 1:8 Stations           1/4         1	Clean-up rooms	1					
Special Procedure Room,	Emergency Surgery,		1 Each <sup>7</sup>			1	
Anesthesia Workroom							
Nursing Service Space: Patient tollet and bath facilities 2   1:8 patients 4   1:12 patients 2   2   2   2   2   2   2   2   2   2	Special Procedure Room,						
Nursing Service Space: Patient toilet and bath facilities 21   1:8 patients 8   1:6 patients 21   2   2   2   2   2   2   2   2   2	Anesthesia Workroom	1					
Patient toilet and bath facilities   Patients   Patie	Exam/Treatment Rooms	1					
Patient toilet and bath facilities   Patients   Patie							
Patient toilet and bath facilities   Patients   Patie	Nursing Contino Chance	1:0 nationts 8		1.6	1:12 potionts <sup>21</sup>		
Kitchen and Food Servicing		1.0 patierits			1.12 paueriis		
Areas				patierits			
Areas	Kitchen and Food Servicing	1				1	
Laundry, Soiled Sorting	<u> </u>						
Morgue	Labor Rooms	1		1 <sup>17</sup>	1 <sup>17</sup>		
Morgue							
Negative-pressure Isolation   210						1	
Rooms   1				110	1 <sup>10</sup>		
Nurses' Stations	Rooms <sup>10</sup>	_			·		
Positive-pressure Isolation	Nurses' Stations <sup>9</sup>	1					
Rooms   Dest anesthesia Recovery   1	Physical Therapy						
Rooms   O	Positive-pressure Isolation	2 <sup>10</sup>		1 <sup>10</sup>	1 <sup>10</sup>		
Radiographic Suites	Rooms <sup>10</sup>						
Utility Room, Clean9         1           Utility Room, Soiled8         1           Nursery Exam/Workrooms         1           Nurseries; Well Newborn         1:6           Intensive Care         Bassinets           Intermediate Care         1:4           Bassinets         1:4           Bassinets         1:4           Coronary Care Units13         1:6 Beds         114           Coronary Care Unit         1:1 Patient Room         1           Dialysis Units         1:8 Stations         114         1           Dialysis Isolation Room Central Supply and         1         1	Post anesthesia Recovery	1					1
Utility Room, Soiled®         1         11²²           Nursery Exam/Workrooms         1         1           Nurseries; Well Newborn         1:6         1:6           Intensive Care         Bassinets         1:4           Bassinets         1:4         1           Bassinets         1:4         1           Intensive Care Units³³         1:6 Beds         1¹⁴         1           Coronary Care Unit         1:1 Patient Room         1¹⁴         1         1           Dialysis Units         1:8 Stations         1¹⁴         1         1           Dialysis Isolation Room         1         1         1         1           Central Supply and         18         1         1         1	Radiographic Suites	1		111			
Nursery Exam/Workrooms         1           Nurseries; Well Newborn         1:6           Intensive Care         Bassinets           Intermediate Care         1:4           Bassinets         1:4           Bassinets         1:4           Coronary Care Units 13         1:6 Beds         114           Coronary Care Unit         1:1 Patient Room         114         1           Dialysis Units         1:8 Stations         114         1         1           Dialysis Isolation Room         1         1         1         1           Central Supply and         18         1         1         1	Utility Room, Clean <sup>9</sup>	1					
Nurseries; Well Newborn         1:6           Intensive Care         Bassinets           Intermediate Care         1:4           Bassinets         1:4           Bassinets         1:4           Coronary Care Units 13         1:6 Beds         114           Coronary Care Unit         1:1 Patient Room         1           Dialysis Units         1:8 Stations         114         1           Dialysis Isolation Room         1         1         1           Central Supply and         18         1         1	Utility Room, Soiled <sup>9</sup>	1					1 <sup>12</sup>
Intensive Care       Bassinets         1:4       Bassinets         1:4       Bassinets         Intensive Care Units <sup>13</sup> 1:6 Beds       1 <sup>14</sup> Coronary Care Unit       1:1 Patient Room       1         Dialysis Units       1:8 Stations       1 <sup>14</sup> 1         Dialysis Isolation Room       1       1         Central Supply and       1 <sup>8</sup> 1	Nursery Exam/Workrooms	1					
Intermediate Care         1:4 Bassinets 1:4 Bassinets         1:4 Bassinets	Nurseries; Well Newborn	1:6					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Intensive Care	Bassinets					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Intermediate Care	1:4					
Bassinets		Bassinets					
Intensive Care Units <sup>13</sup> 1:6 Beds         1 <sup>14</sup> 1           Coronary Care Unit         1:1 Patient Room         1 <sup>14</sup> 1           Dialysis Units         1:8 Stations         1 <sup>14</sup> 1           Dialysis Isolation Room         1         1           Central Supply and         1 <sup>8</sup> 1		1:4					
Coronary Care Unit         1:1 Patient Room         1 <sup>14</sup> 1           Dialysis Units         1:8 Stations         1 <sup>14</sup> 1         1           Dialysis Isolation Room Central Supply and         1 <sup>8</sup> 1         1		Bassinets					
Room		1:6 Beds		114			1
Dialysis Units         1:8 Stations         1 <sup>14</sup> 1         1           Dialysis Isolation Room         1         1         1         1           Central Supply and         1 <sup>8</sup> 1         1         1	Coronary Care Unit			1 <sup>14</sup>			1
Dialysis Isolation Room 1 Central Supply and 18 1							
Central Supply and 1 <sup>8</sup> 1	Dialysis Units	1:8 Stations		114		1	1
Central Supply and 1 <sup>8</sup> 1	Dialysis Isolation Room	1		1			
	-					1	
	Sterilization	, ,				•	

Laboratories	18			1	
Medicine Rooms <sup>9, 16</sup>	18				
Nursing Unit			1 <sup>15</sup>	1	
Occupational Therapy	18				
Patient Pantries	1 <sup>5</sup>				
Pharmacy	18				

- <sup>1</sup> Separate toilet facilities shall be provided for the use of patients, staff personnel and visitors.
- <sup>2</sup> Fixtures shall be equipped without aerators. The water discharge point shall be 127 millimeters (5 inches) above fixture rim and be equipped with hot-and cold-water supplies not requiring direct contact of the hands for operation (wrist or elbow blades are not acceptable). Sensor operated fixtures may be used, provided they are either battery operated or connected to the critical branch of the essential electrical system.
- <sup>3</sup> Each department shall be served by a service closet equipped with a service sink. Departments may share service closets provided the departmental services are compatible. The fixtures listed cannot be shared.
- <sup>4</sup> Clinic sinks shall be rim flushing with integral 3-inch (76 mm) trap in which the upper portion of a visible trap seal provides a water surface, and shall be equipped with flushometer valve and hot-and cold water supplies.
  - Exception: Clinic sinks are not required for chemical dependency recovery hospitals.
- <sup>5</sup> Conventional spouts and controls on hot-and cold-water supplies are acceptable. Aerators are not permitted.
- <sup>6</sup> a. A minimum of two scrub sinks shall be provided in a surgical unit containing one operating room. Four scrub sinks shall be provided in surgical units containing two operating rooms. One additional scrub sink shall be provided per each additional operating room.
  - b. A minimum of two scrub sinks shall be provided in a delivery unit containing one delivery room. One additional scrub sink shall be provided for each additional delivery room.
- <sup>7</sup> The scrub sink is in addition to the required number for surgeries.
- <sup>8</sup> Conventional controls on hot-and cold-water supplies are acceptable. The water discharge points shall be 127 millimeters (5 inches) above the fixture rims and equipped without aerators.
- <sup>9</sup> Includes rooms or areas within coronary-and intensive-care units and post anesthesia recovery rooms.
- <sup>10</sup> The following fixtures shall be provided in isolation rooms of hospitals only:
  - a. Within an adjoining toilet room, a lavatory, a shower containing a seat or a space for a shower chair, and water closet equipped with bedpan flushing attachment with a vacuum breaker.
  - b. A sink equipped per Note 2 within a separate anteroom.

Exception: Chemical dependency recovery hospitals.

- <sup>11</sup> A toilet room with lavatory shall adjoin each fluoroscopy room.
- <sup>12</sup> The clinic sink may be deleted if all bedrooms in the nursing unit are provided with adjoining toilets with bedpan flushing devices.

Exception: Chemical dependency recovery hospitals are not required to provide bedpan-flushing devices.

- <sup>13</sup> Includes burn treatment and respiratory-care units.
- <sup>14</sup> The water closet must be equipped for both staff and patient use if only one water closet is provided.
- <sup>15</sup> Minimum of one tub room per floor on nursing units provided skilled nursing or intermediate care services.
- <sup>16</sup> If a separate medicine room is provided, the room shall be equipped with a sink in addition to the nurses' station sink. Hot-water supplies are optional.
- <sup>17</sup> One toilet with lavatory and one shower may serve more than one labor room.
- <sup>18</sup> Chemical dependency recovery hospitals are only required to provide lavatories equipped per Note 2 for exam rooms and kitchens. All other fixtures may be equipped per Note 5.
- <sup>19</sup> The following fixtures shall be provided in isolation rooms of correctional treatment centers only:
  - a. Within an adjoining toilet area, a lavatory, a shower containing a seat or a space for a shower chair, and water closet equipped with bedpan flushing attachment with a vacuum breaker.
  - b. A sink equipped per Note 2 within a separate anteroom.

(END OF ITEM)

## **MATRIX TABLES**

	California Plumbing Code Chapter 4				
	Comments		OSI	HPD	
		1	2	3	4
Adopt entire UPC chapter					
without amendments					
Adopt entire UPC chapter					
as amended (amended					
sections listed below)					
Adopt only those sections		X	Х	Х	Х
of UPC which are listed					
below and adopt only					
those California					
promulgated sections					
listed below. 401.0 – 401.2 UPC		V	V		
		X	X	X	X
402.1 – 402.2 UPC 402.5 CA		X	X	X	X
402.5 CA 402.6 UPC		X	X	X	X
402.6 OPC 402.7 CA		X	<u>^</u>	X	X
402.7 CA 402.8 w/exception UPC		X	X	X	X
402.9 UPC		X	X	X	X
403.0 – 403.1 UPC		X	X	X	X
404.0 UPC		X	X	X	X
405.0 – 405.4 UPC		X	X	X	X
406.0 – 406.3 UPC		X	Х	X	X
406.4 UPC		X	X	Х	X
407.0 – 407.3 UPC		X	Х	X	Х
407.4.1 CA		X	X	X	X
408.0 – 408.6 UPC		X	X	X	X
408.8 UPC		X	Х	X	X
409.0 – 409.2.4 UPC		Х	Χ	Χ	Χ

<sup>&</sup>lt;sup>20</sup> Fixtures serving individual patient rooms shall not be considered as meeting the required ratios for bedrooms not served by individual adjoining toilet or bathrooms.

21 A minimum of one bathtub is required on each floor of an acute care or acute psychiatric hospital providing skilled nursing

or intermediate care services.

_					
410.0 UPC		Χ	Χ	Х	Х
411.0 – 411.3 UPC		Χ	Χ	Χ	Χ
411.4 UPC		Χ	Χ	Χ	Χ
411.5 UPC		Χ	Χ	Χ	Χ
411.6 UPC		Χ	Χ	Χ	Χ
412.0 – 412.12 UPC		Χ	Χ	Χ	Χ
413.1 CA		Χ	Χ	Χ	Χ
413.2 UPC		Χ	Χ	Χ	Χ
413.3 UPC		Χ	Χ	Χ	Χ
413.4 UPC		Χ	Χ	Χ	Χ
413.5.1 UPC		Χ	Χ	Χ	Χ
413.5.2 UPC		Χ	Χ	Χ	Χ
413.5.3 UPC		Χ	Χ	Χ	Χ
415.0 – 415.4 UPC		Χ	Χ	Χ	Χ
417.0 – 417.2 UPC		Χ	Χ	Χ	Χ
419.0 UPC		Χ	Χ	Χ	Χ
420.0 UPC		Χ	Χ	Χ	Χ
Table 4-1 CA		Χ	Χ	Χ	Χ
Ti	o change to the matrix is necessary. ne new proposed amendments to Table 2 will be adopted for OSHPD 1, 2, 3 &	X	Х	X	X

Cha	California Plumbing Code pter 6 – Water Supply and Distribution				
	Comments		OSI	HPD	
		1	2	3	4
Adopt entire UPC					
chapter without					
amendments					
Adopt entire UPC		Χ	Х	Х	Χ
chapter as amended					
(amended sections					
listed below)					
Adopt only those					
sections of UPC which					
are listed below and					
adopt only those					
California promulgated					
sections listed below.					

604.4.00		Х	Х	Χ	Х
604.1 CA					
604.1 Exception #1 CA		Х	Х	Χ	Χ
604.1 Exception #3 CA		Χ	Χ	Χ	Χ
604.11 UPC	Not adopted by OSHPD.				
604.11.1 UPC	Not adopted by OSHPD.				
604.11.2 UPC	Not adopted by OSHPD.				
605.8 CA		Χ	Χ		Χ
606.2.4.1 CA		Χ	Χ	Χ	Χ
609.11 CA		Χ	Χ		Χ
612.0 CA	No change to the matrix is necessary. The proposed amendment in subsection 612.1 & 612.2 will be adopted for OSHPD 1, 2, 3 & 4 and falls within Section 612.0.	X	X	X	X
612.5 CA		Χ	Χ	Χ	Χ
613.0 CA		Χ	Х	Χ	Χ
614.0 CA		Χ	Χ	Χ	Χ
614.1 CA		Χ	Χ	Χ	Χ
614.2 CA		Χ	Χ	Χ	Χ
614.3 CA		Χ	Χ	Χ	Χ
614.4 CA		Χ			

	California Plumbing Code Chapter 9 - Vents				
	Comments		OSI	HPD	
		1	2	3	4
Adopt entire UPC					
chapter without					
amendments		1.			
Adopt entire UPC		X	Х	Х	Х
chapter as amended					
(amended sections					
listed below)					
Adopt only those					
sections of UPC which					
are listed below and					
adopt only those					
California promulgated					
sections listed below.					
903.1.2.1 CA		Х	Х	Х	Χ
906.2.1 <u>CA</u>	New proposed amendment.	Х	Χ	X	<u>X</u>

#### **SUB-ITEM 13-2**

## **CHAPTER 6 – WATER SUPPLY AND DISTRIBUTION**

Section 612.0 [For OSHPD 1, 2, 3 & 4] Domestic Hotwater Distribution Systems for Health Facilities and Clinics.

**612.1** The domestic water-heating equipment....

612.2 At least two pieces of het-water-heating equipment shall be provided to supply hot water for dishwashing and minimum patient services such as hand washing and bathing. Booster heaters for 125 F. to 180 F. (52 C. to 42 C.) water are acceptable as a second piece of equipment for dishwashing. Where storage tanks are separate from the water heater, at least two independent storage tanks shall be provided.

612.3 Instantaneous heaters are permitted....

Notation

Authority: Health & Safety Code Sections 1226, 1275, 129790 and 129850 and Government Code

Section11152.5

Reference: Health and Safety Code Section 129850

(END OF ITEM)

## **SUB-ITEM 13-3**

## **CHAPTER 9 – VENTS**

## 906.0 Vent Termination

906.1 Each vent pipe or stack shall....

**906.2** Each vent pipe shall terminate not less than ten (10) feet (3084 mm) from, or at least three (3) feet (914 mm) above any openable window, door, opening, air intake, or vent shaft, nor less than three feet(3) feet (914 mm) in every direction from any lot line; alley and street excepted.

<u>906.2.1 [for OSHPD 1, 2, & 4] Each vent pipe shall terminate not less than twenty-five (25) feet (7620 mm) from any air intake or vent shaft.</u>

Notation

Authority: Health & Safety Code Sections 1226, 1275, 129790 and 129850 and Government Code

Section11152.5

Reference: Health and Safety Code Section 129850

## Part 9 California Fire Code

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ITEM 14 SFM 2/02 Part 9, Article 10 Section 1006.2.7.1.1 & 1006.3.3.3.1

## **EXPRESS TERMS**

{The proposed amendment below allows Group I, Divisions 1.1, 1.2 and 2 Occupancies to activate an audible fire alarm signal by zones rather than throughout the entire building.}

## SUB-ITEM 14-1

Article 10 - Fire Protection Systems and Equipment

SECTION 1006 — Fire Alarm Systems

**1006.2.7.1.1 System Requirements.** Group I, Divisions 1.1, 1.2 and 2 Occupancies shall be provided with an approved manual and automatic fire alarm system in accordance with Section 1006.2.7.1. See also Section 1006.2.12. Smoke detectors shall be provided in accordance with the Building Code as follows:

- At automatic-closing doors in smoke barriers and one-hour fire-resistive occupancy separations,
- 2. In waiting areas which are open to corridors.
- 3. In-patient sleeping rooms. (See California Building Code Section 308.10.1)

When actuated, alarm-initiating devices shall activate an alarm signal, which is audible throughout the building <u>or</u> in designated portions of the building when approved.

**EXCEPTION:** Visual alarm-signaling devices are allowed to substitute for audible devices in patient use areas.

Authority Cited-Health and Safety Code Section 13143. Reference-Health and Safety Code Section 13143(a).

{The purpose of the amendment below is to make the regulation consistent with existing SFM regulations of the CBC and CFC that require the patient room smoke detectors to be system detectors and not single station detectors.}

\* \* \*
(END OF ITEM)

## **SUB-ITEM 14-2**

**1006.3.3.3.1 General.** When actuated, fire alarminitiating devices shall activate an alarm signal, which is

audible throughout the building or in designated portions of the building when approved.

**EXCEPTION:** Single-station detectors [For SFM] smoke alarms and multiple-station smoke alarms in dwelling units, rooms used for sleeping purposes in hotel and lodging houses. , and patient sleeping rooms in hospitals and nursing homes.

Authority Cited-Health and Safety Code Section 13143. Reference-Health and Safety Code Section 13143(a).

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